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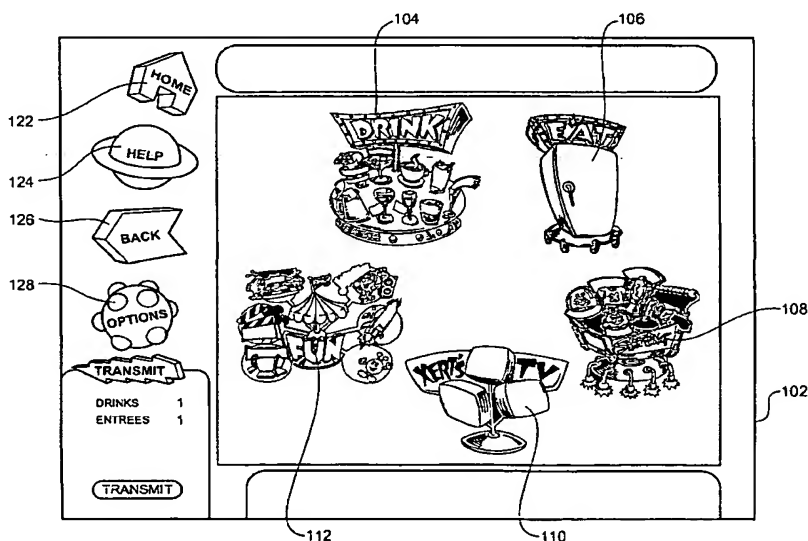
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(54) Title: A USER INTERACTIVE SYSTEM AND METHOD COMPRISING PROFILES



(57) Abstract: The present invention describes an interactive user ordering system including a user interface having a display screen with display information shown on said screen for the user to utilise in making a selection. The displayed information includes a plurality of indicia forming a profile, each indicia displayed at a pre-determined location the display screen. At least some of the indicia are selectable by the user and relate to a specific request. The system includes a plurality of profiles where indicia from different profiles that are displayed at the same location represent the same request. Thus different indicia may be displayed to different users but relating to the same request to the operator.



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**TITLE**

A user interactive system and method comprising profiles.

The present invention relates to an user interactive system that assigns profiles to users, the profiles enabling the provision of information and services to the user to be tailored to their specific needs. In particular it enables the user to be provided information and/or services in a format suitable for their language, culture or demography.

**BACKGROUND OF THE INVENTION**

Interactive systems where the user is provided information over a network by selecting different buttons or indicia are known, as are systems that provide the user with the choice as to the language. However, these systems require separate data files that work independently from each other and are not related. Essentially these systems operate by enabling the user to select and move between independent and different files. As such these systems are not really designed as a single system that caters for individual users but is rather a collection of unrelated data files and databases.

Some interactive systems, such as those found in restaurants, do provide the facility for a user or customer to place orders, such as food orders over a computer network. However there are currently no known systems to the applicant that enable the same system to be used in a variety of languages and backgrounds, that are able to be chosen at the same time a user is provided a table and where the operator can receive requests from users regardless of the interactive screen that is provided to the user.

It is therefore an object of the present invention to provide for a system that overcomes the aforementioned problems or provides the public with a useful alternative.

Although the following description will concentrate on a system used in a restaurant it is to be understood that the present invention may equally well be used in other applications, such as hotels, and many other venues.

The present invention is one of a five co-pending applications describing an interactive ordering system and the development and management thereof, the system having application in environments such as a restaurants, hotels, casinos and so on. For a full description of the system, the reader is referred to these five co-pending applications by the same applicant that relate to different aspects of the system, namely:

“A video and video management system for navigation through a user interface system”. This aspect of the system enables the user to navigate through a hierarchical menu structure used in providing the user with selectable indicia.

5 “A user interactive system and method comprising profiles”. This aspect of the system provides users with a choice of indicia that may be in a form of graphical images relating to their language and/or customs, whilst remaining transparent to the rest of the operating system.

10 “An interactive ordering and management system and method”. This aspect of the system enables management of user orders and requests and provides information to the system operator.

“A user interface development system and method”. This aspect of the system relates to the development of the user interface by subsequent use by users seeking to submit orders and requests. In particular, this aspect provides the ability for relatively low skilled operators to develop and/or modify the visual aspect of a user interface.

15 “A user interface management system and method”. This aspect of the system relates to the management of the user interface development system thus providing relatively highly skilled administrators with the ability to provide low skilled operators with the facilities to develop and/or modify the visual aspect of a user interface.

20 Thus the present invention relates specifically to “A user interactive system and method comprising profiles”. The contents of the other four co-pending applications are intended to be incorporated within the present specification by reference thereto.

### **SUMMARY OF THE INVENTION**

In one aspect of the invention there is provided an interactive user ordering system including:

25 a user interface having a display screen with display information shown on said screen for the user to utilise in making a selection, said display information including a plurality of indicia forming a profile, each indicia displayed at a pre-determined location on said display screen;

30 at least some of said indicia being selectable by the user and related to a specific request;

said system having a plurality of profiles where indicia from different profiles displayed at the same location represent the same request.

This enables customers that require different indicia to be able to operate the system and pass requests to the operator without the operator needing to be concerned with their particular profile.

Advantageously said ordering system includes a central server coupled to said user interface for storing a plurality of profiles and includes a selection means enabling an operator to select a profile to be displayed by said user interface, said selected profile transmitted to the user interface.

The operator can therefore when ushering users to their interface select a profile appropriate to them. Examples of different profiles include children's profiles, lunchtime profiles and different language profiles.

Preferably there is a two-tier structure of indicia in that selecting one indicia displays to the user a second set of indicia, said second set forming part of the same profile. Thus when one indicia are selected a further set of indicia are displayed.

Preferably there is a third-tier structure of indicia wherein selecting an indicia from the second set displays to the user a third set of indicia. When the second set of indicia are selected a third set of indicia are provided.

Preferably at least some of said indicia are graphical images. Generally the indicia may be graphical images. As such the graphical image may include text in English or another language. Those skilled in the art will appreciate that this transparency as far as the operator is concerned provides the flexibility to tailor the display to different users.

Preferably at least some of said indicia are audio/visual files.

In preference at least some of said indicia are text files.

Preferably at least some the indicia are chosen from the type consisting of but not limited to foods, beverages, games, information, and personal services.

In preference said system further includes static indicia that are displayed regardless of the tier indicia displayed. Thus, there could be a general help or other indicia that are provided regardless of the tier that the display is currently displaying.

Preferentially said profiles include indicia graphically representing different languages.

In preference the operator selects different profiles to be displayed depending on the relative time of day.

Preferably said system further includes at least one advertising profile, said advertising profile displayed on the display screen only when the user has selected a pre-determined indicia.

Preferably said advertising profile is displayed at a pre-determined location on said display screen.

Preferably said advertising profile includes displaying information related to the indicia selected by the user.

10 Preferably said advertising profile is displayed according to the time of day.

Preferably said advertising profile includes files selected from the group including graphical files, audio/visual files and textual files.

Preferably said indicia are embedded in a video.

In preference there are a plurality of user interfaces.

15 Preferably said user interfaces are video display terminals in a restaurant.

Preferably said user interface includes a computer program product and a computer system including a video monitor, a central processing unit, and means coupled to the central processing unit for storing a database containing the indicia displayed to the user.

20 In a further aspect of the invention there is provided an interactive user ordering system including:

a user interface having a display screen with display information shown on said screen for the user to utilise in making a selection, said display information including a plurality of indicia forming a profile, each indicia having a unique identification means and being

25 displayed at a location on said display screen;

at least some of said indicia being selectable by the user and related to a specific request;

said system having a plurality of profiles where indicia from different profiles represent the same request and share a common unique identification means.

In a still further aspect of the invention there is provided a method of providing a user with an interactive ordering system said method including the steps of:

creating a first profile having a number of indicia, each indicia representing a different request and having an identification means;

- 5 creating a second profile having a number of corresponding indicia, each indicia representing the same request as in the first profile but being visually different to the indicia in the first profile.

Other objects and advantages will become apparent when taken into consideration with the following drawings and specifications.

## 10 **BRIEF DESCRIPTION OF THE DRAWINGS**

The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate several implementations of the invention and, together with the description, serve to explain the advantages and principles of the invention. In the drawings,

- |    |          |   |
|----|----------|---|
| 15 | Figure 1 | illustrates in detail information available to the host podium in relation to the interactive tables in the restaurant;                           |
|    | Figure 2 | depicts a typical table details window for an allocated interactive table;  |
| 20 | Figure 3 | illustrates a typical table details window for an interactive table as it is being allocated a profile;   |
|    | Figure 4 | depicts a typical screen shown on the screen at the beginning of the session for an interactive table;  |
|    | Figure 5 | illustrates the Home page or the first tier menu that the customer uses to navigate through the system;   |
| 25 | Figure 6 | is an outline of the screens used in the ordering system, indicating the different active areas of the screen;                                    |
|    | Figure 7 | illustrates the second layer or tier, in this case the Drinks menu;   |
| 30 | Figure 8 | illustrates the Kids' drinks menu within the Drinks menu, illustrating a milkshake chosen with a choice of four different flavours or condiments; |

- Figure 9 illustrates the second tier or layer for the Eat menu;
- Figure 10 is a typical screen displayed to the user when help from a waiter has been requested; and
- Figure 11 is a typically first tier or layer when used in a hotel operating environment.
- Figure 12 is a schematic diagram of a typical database used in the preset invention illustrating the advertising tables of the database;
- Figure 13 illustrates the profile tables of the database;
- Figure 14 illustrates the profile tab of the Content Management Utility screen;
- Figure 15 illustrates the visual and audio maintenance tab of the Content Management Utility screen;
- Figure 16 illustrates the system maintenance tab of the Content Management Utility screen;
- Figure 17 illustrates the Content Management Utility window when being edited;
- Figure 18 illustrates the Category Image Assignment window of the profile maintenance of the Content Management Utility;
- Figure 19 illustrate the list of category images available under the Edit Category selection of the profile maintenance of the Content Management Utility;
- Figure 20 illustrates the time period maintenance screen of the profile maintenance of the Content Management Utility;
- Figure 21 illustrates the screen editor of the profile maintenance section of the Content Management Utility;
- Figure 22 illustrates the buttons for a navigation screen;
- Figure 23 illustrates creating a new button for the navigation screen;
- Figure 24 illustrates the Advertisement Theme form of the System Maintenance of the Content Management Utility; and



Figure 25 illustrates the Advertisement Groups form for the System Maintenance of the Content Management Utility.

### **DESCRIPTION OF THE PREFERRED EMBODIMENT**

The following detailed description of the invention refers to the accompanying drawings.

5 Although the description includes exemplary embodiments, other embodiments are possible, and changes may be made to the embodiments described without departing from the spirit and scope of the invention. Wherever possible, the same reference numbers will be used throughout the drawings and the following description to refer to the same and like parts.

10 The first part of the description will relate to the conceptual idea of the profiles and how they may be used. The latter part of the description will deal with how the profiles are managed by the systems operator.

Service providers, such as restaurants and/or hotels at times need to be adaptable to service people with different language and/or cultural differences. People from a  
15 different language background may have difficulty interpreting a restaurant menu or reading instructions if it is written in a language other than own. Further still, even in a common language as English, the same word may have a different meaning to different cultures. For example, an Entrée in Australia is considered a pre-main meal, whilst in the United States it is considered to be the main meal.

20 For that reason, some service establishments like restaurants provide different menus for different customers. Although this is quite useful one can appreciate the effort and expense required to meet the diverse range of customers.

Accordingly, the present invention overcomes these difficulties in an interactive type of service system by assigning profiles to customers. A profile includes information that is  
25 appropriate for that customer. For example, there may be a children's profile that in a restaurant type of environment does not include alcohol in its menu. There may also be a Japanese profile where the primary language is Japanese. There may also be a profile that is related to a lunchtime menu rather than an evening menu.

When a customer uses their profile they are provided with an interactive screen from  
30 which they can obtain information and/or order goods/services but which is presented in a fashion suitable for their own use, whether it be a different language or style. At the same time the operator is not concerned with what profile is being assigned to the user,

and as far as they are concerned, they receive the same requests from a customer regardless of what profile they have been allocated.

The following detailed description relates by way of example to the use of a profile in a restaurant. There the restaurant operator has a choice of various profiles they may assign to customers. Those skilled in the art will however appreciate that use of profiles may equally well be applicable to other environments such as hotels where different rooms are allocated different profiles, casinos where the operator may assign different games available to different players and in different languages. It may equally well be applied to other services where it would be of benefit to present the same information to different users in a different language, time or style.

In the following description reference to XOS is defined to be the Xerts Ordering System, Xerts being a trade mark used by the operator to define a restaurant.

We deal with firstly a typical example of how a restaurant operator may first allocate a profile to a customer in an interactive type of restaurant.

The host podium in a restaurant may include a number of screens of information that is provided to the host, and whereby the host may also changes the status of information in relation to individual tables. Typically the host podium allocates tables and ensures that the tables are properly managed. A typical screen that is accessible and controllable by the host podium is illustrated in Figure 1.

A portion of typical first screen 10 seen by the host podium or operator of the system is shown in Figure 1. There background lines define a background layout of the tables and areas within the restaurant. In Figure 1 the background lines 12 define 6 booths, each booth defined by a dividing wall 14, seat 16 and table 18, the booths disposed circumferentially around a central area 20.

Superimposed on each booth is a rectangle 22 with a thick border 24, a top left hand side number 26 within the rectangle the border, a bottom number 28 and a small square 30 within the top right hand side of the rectangle. These numbers may signify various things. In this embodiment, the left hand side number 26 is the number of the table, the bottom number 28 the amount of time that the table has been occupied by a particular customer, whilst the right hand square 30 is a unique colour or shading of the waiter that has been allocated responsibility for this table.

The border 24 is adapted to be visibly different to the rest of the rectangle either by using a different colour, shading or fill that indicates the status of the table. The different possible statuses are shown in the legend 32 where one can see that the border has six pre-defined states including table vacant 34, table allocated 36, table being cleaned 38, table reserved 40, table out of service 42 or that the table has an interactive or XOS system 44. In use it is expected that these attributes would be defined preferably by the use of colour. Thus a green border means a table is allocated, a red border means that the table is vacant, a black border means it is out of service, and orange border that it is being cleaned, whilst a purple that the table is reserved

- 10 As illustrated in Figure 1 the first table 46 having the number one for the left hand side number 26 indicates to the host podium that it is table 1. The border 24 matches the "Table Allocated" shading 36 in the legend 32 that thus indicates to the host that the table is being used. The bottom number 28 indicates to that customers have been seated at that table for 0:15 hours or 15 minutes. The shading of the top right hand square 30 indicates to the host what waiter is servicing this table, which is different for example to the waiter 30 for table 2. Table 1 further includes an exclamation mark 48 that indicates to the host that there are further details available on the customers or group at this particular table.

- To allocate a table, the host will click on the table that they wish to allocate. Of course, clicking on any table will then bring up the table details screen 50 that provides the host with detailed information on each table. The table details screen is shown in more detail in Figure 2, which provides information to the host and includes associated buttons that enable the host to change the information. Thus, to view the details of a table the operator selects the table on the floor plan. The table details window 50 will then appear. In the main left hand side of the form one is provided with the session details of the table including the table status 52, profile 54, number seated 56, guest name 58, any comments 60, child lock 62, and whether or not any cards have been swiped 64.

- On the right hand side of the table details window 50 there is provided further information on the table itself including the table number 66, table capacity 68 and colour of the table 70 (waiter allocation). There is also provided a "requires help" 72 and a "bill requested" 74 button. If either of these buttons is of a different shading or colour, generally bright red, then action on the XOS by the operator is required.

To clean a XOS whilst it is running the operator needs to simply activate the clean button 76. Below the bill requested button there is provided the time 78 that customers have been seated at the table and whether or not the current customers have ordered any food/drinks 80. Advanced features available for the table can be selected by  
5 pressing button 82.

By selecting the appropriate button, if there is one available, the operator can change details associated with a table. Once satisfied with the details, the changes can be saved by selecting the apply button 84 and then closing the window using button 86. When the host then allocates a table, the software is started up and awaits activation at  
10 the table. Then when the guests are at the table generally they just need to activate the screen to start the programme. Generally either using a mouse or a touch screen achieves this.

The present application relates to the profiles that can be allocated to the users. For a description of the other features available the reader is directed to the above defined  
15 co-pending applications.

To select a profile for a table, the operator selects the profile button 54. This brings up profile selector screen 88, as illustrated in Figure 3 that provides the operator with a choice of a number of profiles that they may select. In this particular example there is shown a profile "April 2000" 90, a profile "Japanese language" 92 and a profile "Lunch  
20 time menu" 94.

Each profile represents a different combination of video and/or graphical files that are provided to users at the table. Typically a profile also includes a navigation video presenting graphics for the user to see. For that reason the profile enables the operator to present to a user a foreign language. To select the profile it is highlighted and  
25 confirmed as being the profile allocated by selecting the tick button 96.

Once all the other details have been entered by the operator the apply button 84 is selected, followed by the close button 86. The host then runs the software that the guests will use. Then the guests are welcomed at the table with an initial screen where they are prompted to start the interactive session. A typical screen is shown in Figure 4  
30 where a cartoon character 98 is present together with text 100 welcoming the guests to the table. One can appreciate that if this was a Japanese profile, the text 100 would be in Japanese.

Throughout the use of the interactive session, guests are entertained and communicate with the operator by the use of various graphical screens. After the programme has been started it typically goes through several entertainment screens until it reaches the main menu from which the guests may choose what they wish to do. The main menu screen is illustrated in Figure 5 and allows the user to select a number of actions. The screen is divided into a number of discrete parts, seen more clearly in Figure 6. In fact the main screen is in fact a HTML page with a video embedded in it. Hence the video is played in the frame of the HTML and is a start up video or a navigation video.

Thus within the navigation video 102 the user may select from a number of menus, such as ordering drinks 104, food 106, shopping 108, XertsTV 110 and Fun 112. There is also an advertising section of the screen 114 which plays advertisements, a help section 116 providing help to the user, a category selection 118 which shows to the user what foods and drinks they have selected, and an active section 120 giving options to navigate through the screens such as the Home option 122, Help option 124, Back option 126 and an Options option 128.

As an illustration, when the user wishes to order a drink they select the Drinks button 104 which brings up a menu such as that shown in Figure 7 and where the user can select from different categories of drinks including Mocktails 130, Cocktails 132, Coffees & Teas 134, Kids' Drinks 136, Shooters 138, Soft Drinks 140, Spirits 142, White wine 144, Red Wine 146 and Beers & Alcoholic Sodas 148. In this illustration, all of the information provide is both graphical and textual. For a Japanese profile, the user will appreciate that the text provide will in fact be in Japanese. If one were to select a Children's profile, then the system would not provide the children with the ability to order any alcoholic beverages.

One may also note that the screen has a volume selection 150 on the right hand side to assist the users in regulating the volume on all sound effects.

Once a user selects say the Kids drinks 136, they are provided with a typical screen as shown in Figure 8. This is typically a static video where there is displayed on the periphery of the screen a number of choices. Once a choice is highlighted than the choice changes in colour or other marking and more information is provided in the center of the menu. That information may be in the form of another graphics, such as the large picture in the centre of Figure 8 or alternatively may even be in the form of a

video clip that sponsors the product. Once a choice is desirous to be selected then the user can order it by pressing the add button, in this case the large tick button 152 at the bottom right side of the screen. The order then appears on the left hand side of the menu where it indicates that a drink 154 is on the order pad (see Figure 7).

- 5 The person skilled in the art will appreciate that the drinks menu 136 may be provided in different languages or description.

Every choice on the selection video is simply a choice of the co-ordinates of the screen, which the software knows relates to a certain product. Since all the information is therefore graphical rather than textual, different graphics maybe used that will be  
10 exactly the same choice of product. This enables the profiles to work. The person skilled in the art will appreciate that whether this is a Japanese or English menu, both would order the same products but be in completely different languages.

Furthermore, completely different navigation videos may be used, such as a sports video, or a theme video, whereby the venue may choose different themes and which  
15 does not change the products and options available. Once the order passes through to the kitchen they do not need to know what the profile is only that a certain dish that appears at a particular location on the video has been ordered, that location being common throughout all the profiles.

Figure 9 illustrates the video presented to the user when the user has selected the Eat  
20 selection 106. As with the drinks, a new selection is presented to the user, the language and graphics shown depending on the user profile. This may in some circumstance b important. For example, an Entrée 156 in Australia is deemed to be the meal before the main meal in contrast to the United States where an Entrée is actually defined as the main meal. If the profile selected was the one relating to United States  
25 custom, then the Entrée 156 would be re-labelled as Appetisers.

The use of profiles also enables the user of the system to communicate with the operator. Thus, as illustrated in Figure 10, the user may request help from the system, whereupon a message 158 would appear telling the user that help will be forthcoming shortly. As the person skilled in the art will appreciate, in the case of a Japanese profile,  
30 the textual message would be in Japanese.

It is important to note that the system can be programmed so that in the Advertising section 114, different advertisements may appear that are associated with different

profiles. Thus, if the profile is one for say an evening meal, the advertising may relate to wine, whilst if it is a profile related to the breakfast time, the advertising may in fact relate to coffee. Similarly, if the profile was directed to children, the advertising may relate to soft drinks or even different types of video games. Therefore advertising can be linked to a particular profile and there may be different types of advertising. A first type is system wide advertising or system advertising a second being category advertising and a third a mixture of the two. Thus, in a general menu, the system may provide advertising about any feature, such as particular products. In category advertising, the system may provide advertising in connection with the menu on which the customer is at the current time. Thus if a customer selects the Beers menu in the Drinks menu, category advertising results in adverts being played that relate to beer. The advertising may also change according to the category. If the user has specific category advertising one can specify advertising for a particular category, thereby it can change. One can also have 50/50 advertising, that is, the advertisements are mixed 50/50 though this percentage may change.

As illustrated in Figure 11, a typical hotel room menu 160 available to the user may include a selection of: Travel & Tourism 162, Business Services 164, Entertainment 166, About Town 168, Hotel Services and Preferences 170. The user may select the profile in relation to the language that the information is present. Thus, the user in this example may select between languages that are identified by the use of flags 174.

We now deal with the management side of the profiles and advertising profiles.

The present invention uses a database to manage the functions that provide the end result to the user. The database has a number of individual tables that make up the database. The database is used to run the system, the host podium and the transfer of information between various systems. Herein we will discuss in detail the tables that relate to the profiles only. We begin first by describing the tables associated with advertising within profiles.

#### Advertising Tables

Figure 12 illustrates the advertising tables used in the present database. Before describing the advertising tables it is important to understand how the advertising works. Advertising is the messages that appear on the screen to the user, usually in a

pre-determined area of the screen and whose content can change depending on the screen that the user is accessing at the time.

Advertising is broken into profiles. Each advertising profile may be assigned to a customer or XOS profile. Therefore one may have an advertising profile for Japanese customers which links to a XOS Japanese profile. One may also have an advertising  
5 profile in English which links to an English XOS profile. There can also be children's advertising in children's profile and so on.

Within an advertising profile the operator may specify when and where a particular set of advertisements are played. A set of advertisements is called an advertising group.

10 This is made up of several individual advertising images.

For example, a particular advertising group may be made up of five images. If these images all relate to one product, such as beer, this is defined as a beer-advertising group. The operator may then specify when and where in the database, in the XOS, the particular beer group appears. For example the operator may select that the beer group  
15 may only ever be seen at dinnertime and only when the customer is in a drinks screen. The operator may also select that the beer group will be shown all day but only in the beers and sodas screen.

This amount of flexibility results in a somewhat complicated table structure. There are five tables defined as follows; advProfile 210 (advertising profile), advGroup 212  
20 (advertising group), main\_advGroup 214 (maintenance of advertising group), advImages 216 (advertising images) and advTimePeriod 218 (advertising time period).

We deal first with the advertising profile 210. As described previously, an advertising profile is constructed from different advertising groups for a particular set. For example there may be an advertising profile for children or one for another language. In this  
25 table there is provided a profile ID 220, a description 222, the description being the name of the profile. The description is used to distinguish between the different advertising profiles.

The advertising time period table 218 allows the operator to select when a particular advertising group is played. For example, the operator may want beer advertisements  
30 to play at lunchtime. These particular time periods are calculated in the advertising time period table 218. The total of all the time periods cover a twenty-four hour period of time but must never overlap. In the table there is a provided a time period ID 224 that is



the primary ID followed by a description 226. The description is used in the to allow the operator to distinguish between time periods. A start time 228 and an end time 230 are also provided. As an example, lunch may be the description, with a start time of 11:30 and an end time of 14:00 hours.

- 5 As mentioned above, a profile is made up of several advertising groups. Each advertising group, for example beer, is made up of several advertising images. The advertising images table 216 has several entries that are primary keys. The advertising group ID 232 may link a particular image to the beer. The image ID 234 is a foreign key link to the image catalogue and gives the ID of the particular advertisement that the  
10 operator may wish to show, such as a particular brand of beer. The play order 236 allows the operator to choose where in the group they wish this particular brand advertisement to play. If it is to played first the operator enters 1 (one), to play fifth, the operator enters a five (5) and so on. Generally consecutive numbers must be provided. This rule is maintained in the system. Using these three values as the primary key, the  
15 operator can have the same image appear many times in the particular group. For example the brand beer may appear as advertisement one and as advertisement five in this particular example.

- The groups are given a particular name in the main advertisement table 214. Like other maintenance tables described in the maintenance system the group is given a group ID  
20 238 and a description 240. This description is simply used in the system to allow the operator to distinguish between groups. In the beer example the operator enters the unique primary key followed by beer. All the advertising images then have the same group ID as beer but they have separate ID's and group order until the group is filled. The size of the group is not determined and may be any value at all from one to higher  
25 values.

- The advertising group table 212 is the table that links everything else together. This table has four values for the primary key, the primary key signified by the key symbol 242. This allows the flexibility of allowing a group to be in a profile, for a specific time and for specific positioning in the ordering system XOS. First in the advertising group  
30 table is the group ID 244. Relating to the beer example this would be the foreign key link to the beer group in the maintenance advertising table 214. Next is the profile ID 246 for the advertisement group. As mentioned previously an advertisement profile is made up of several advertisement groups, therefore each group must be given a

particular profile ID. A group may however belong to several profiles. In the next step, the operator can select for beer, which is a particular profile ID such as adults, the time period ID 248, that is, when they want the beer to appear. The operator may then select from the foreign key in the advertisement time period table 218. Thus, in the example of  
5 a beer in the adult profile, beer may appear in several different time periods; one therefore simply creates a new record for each time period in which the beer group appears.

The final part of the link is the category ID 250. This is a foreign key link to the category part of the category table (discussed later). Each screen is given a particular category  
10 that may already be used in existing systems, such as the well-known Micros. If the Micros category of a screen matches the category of this record in the category ID 250, the operator knows to display this particular group of advertisements if the time period and profile also match. This then allows the operator to say that beer in adults when available at lunchtime will be shown in the screen that has beers and sodas, beers and  
15 sodas having its own category ID. As with time periods one may show in different category ID's the same group. For example if one wanted to show beer in all drinks screen at lunchtime one needs to create a new advertising group record for each drink category ID leaving the group, profile and time period the same. Different category ID will be like wine, soft drinks, cocktails and so on.

20 For a particular group in a particular profile at a particular time and a particular category, in our example for beer, in our adult profile at lunchtime, on beers and sodas, the operator must select the ratio 252. The ratio is very important once the category ID is fully understood. The reason is that not every screen in the XOS is going to relate to a Micros category ID. For example, the Home screen is not related to the Micros  
25 category ID and neither is the transmit screen. Therefore whenever a category ID is not available for a screen one shows the system category. The system category has a category ID of negative one (-1). The system advertisements in the system category will display whenever there is either

(a) no category for the particular screen

30 (b) there is a category for the particular screen but there is no matching group for that particular category.

For example there may be a screen with a category of entrées, but no entrée specific advertisements. In this scenario the operator may show the system advertisements. The ratio allows one to say for a particular beer profile, for a beer in the adult profile at lunchtime for beers and sodas menu the operator wants to show either all beer  
5 advertisements or 50% beer and 50% system. If 50/50 is selected one will first see a beer advertisement followed by a system advertisement, followed by the next beer advertisement.

The field is Random 254 provides the order in which advertising images within an advertising group are going to be played. If is Random is true when the records are first  
10 returned to the XOS they will be randomised. They are only randomised once per XOS session. This ensures fair play for all advertisements. If it is not random then they are simply played in the play order specified in the advertising images.

#### Profile Related Tables

Each session of the XOS runs in a particular XOS profile. That is every screen that  
15 appears on the XOS and every button within every screen is related to that particular profile. This allows the operator to have different versions of the XOS for different customers, for example, a children's version, an adult's version, an English version and a Japanese version. There is no limit to the number of profiles that may be created. To change languages the operator enters a new profile and all the images within that  
20 profile are selected to be the images for that countries' language, for example, there may be a Japanese version of all the buttons. To work with profiles the database includes the Profile table 256, Profile\_TimePeriod table 258 and TimePeriod table 260. We look at each of these in turn first looking at the Profile table and referring to Figure 13.

25 First the Profile has a unique identifier 262 followed by its description 264. This description of the profile is shown in the Content Management System. It is also shown in the Screen Builder system when the operator selects which profile they wish to edit the menus or advertising for, and thirdly it is shown in the Host Podium system. When a waiter assigns a table to customers they must select the profile that the XOS will be  
30 running. It is this description that shows the list.

The start-up screen 268 is the screen ID to a screen that appears when the XOS first starts up. Next is the sound theme ID 270 and which will be discussed further below.

However the sound theme ID that is selected here will apply to all buttons in the XOS. Next there is the Valid 272. As there are so many things that may be changed in a profile it is easy for a profile to become invalid for example screens missing or images missing. Therefore in the Content Management System whenever the operator makes  
5 a change they must re-validate the profile. If they have not re-validated the profile or have re-validated it but it failed that particular profile will not be available in the list in the Host Podium system. Therefore the XOS may never run with an invalid profile. Finally there is the advertising profile ID 274 that is a foreign key link to the advertising profile table. This tells the operator what sets of advertisements will be running for this  
10 particular profile of the XOS. For example if there was a children's profile one could be running a different sets of advertisements then if one were running an adults profile, minimising the use of alcoholic advertisements.

The Profile\_TimePeriod table 258 provides a list of all the profiles and the time periods for which each profile is valid. Before discussing this further we need to look at the  
15 TimePeriod table 260. The TimePeriod table is a list of all time periods 276 that the restaurant is open, broken up into segments. One has a start time 278, an end time 280 and a description 282. The description is purely used for user knowledge in the Content Management system. Common time periods may be breakfast, lunch or dinner. The ProfileTimePeriod table has a profile ID 284 and a time period ID 286, therefore one  
20 can say that this particular profile is valid during lunchtime only. It is important to note that even if a profile is invalid for a time period ID the operator may still select it in the Host Podium system, it will just appear as a different shading or colour. Time periods are used as a recommendation only and will not be forced on the user.

Content management system window or user interface development system

25 The XOS Content Management Utility screen 300 illustrated in Figure 14 can be divided up into three areas as can be seen by three tabs 302, 304 and 306. The first tab 302 relates to the profile maintenance and allows one to edit any details required with respect to each individual profile, Figure 14 illustrating the functions available under the profile tab.

30 The audiovisual maintenance tab 304 allows one to edit the images and the sounds used by the XOS. As seen in Figure 15, there are a total of six choices including Item

Type Maintenance 308, Image Maintenance 310, Sound Maintenance 312, Sound Theme Maintenance 314, Import Files 316 and Remove Files 318.

The system maintenance tab 306 allows one to edit any system details and as shown in Figure 16 includes choices such as XOS/Micros category assignment 320, Edit XOS  
5 Categories 322, System Directories 324, Edit Table Details 326, Table Colour Maintenance 328, Screen Types 330, Button Types 332, Product Maintenance 334, Advertisement Profiles 336 and Advertisement Groups 338.

Along the top of the utility screen 300 there is provided a file menu 340 and a tool bar 342. When in this main area selecting File will enables the operator to change the  
10 database connection. It will also allow the operator to choose whether or not one to view images throughout the system, this being a toggle button. Further, it will also allow one to exit the system by choosing close.

Although not all are shown in the XOS categories, the menu and the tool bar allow for other different functions. Under File there is a close option (not shown) that will return  
15 one to the main menu. Under the Edit button the edit area allows one to edit a new record or delete a record. However this may also be achieved by the plus and minus button in the toolbar. A search function is also provided that allows one to move forward and backward though the records. There is also a find choice for locating records and Help simply provides help through the system.

20 The four arrows 346 on the tool bar enable one to scroll through the records on the grid. The first takes you to the first record, the last takes you to the last record. Back takes you back one record and forward takes you forward one record.

The plus symbol 348 allows one to enter a new record enabling the tick 350 or the undo function 352 on the tool bar. The tick, as one would have thought, allows one to  
25 save changes whilst the undo cancels changes. If one selects the tick any error messages will appear at the bottom of the menu. The edit menu also allows one to save and undo. The minus button 354 will delete any record whilst the filter button 356 will allow the operator to search through the records for a specific entry.

#### Layout of the Profile tab

30 The Profile tab in the Content management Utility provides a number of options for the operator. It enables the operator to edit all the details for each profile in the XOS. Referring now to Figure 14 a list of all the current profiles is listed in the Description grid

358 at the left hand side of the window, whilst the details for that profile window are shown to the right. First there is the identifier 360 which as an arbitrary number. Besides that is a message 362 whether or not the current profile is valid, that is, whether or not it may be used in the XOS. Thus one can see that the April 2000 profile  
5 is valid. To validate a profile one presses the validate profile button 364. Then there is the description 366, which is the name of the profile that will be seen in the Host Podium and Order Manager systems. Below that is the time period 368, which is the default time period for that particular profile.

To the right there is a drop down box 370, which provides the advertising theme that  
10 may be appropriate for use with the profile. We then have three buttons. Edit screens 372 allows one to edit any screens used in the profile that is all the screens that make up a XOS. Edit category images 374 allows one to edit the category images for a profile, that is, the images that are shown for each category in the XOS. For example the bottom left hand side of the XOS in the shopping cart and also the selection screen.  
15 The last button Validate Profile 364, as mentioned above, allows one to validate a profile.

## Profile Maintenance

### Editing a Profile

To create a new profile in the XOS Content Management System using the current  
20 profile as a template the operator chooses the profile maintenance tab then selects the plus button. After a New Profile Dialogue box appears, the operator selects a template profile from the choices presented in the list within the drop-down box and which presents a list of all current valid profiles. One then selects the relevant profile and enters the relevant description. Selecting the OK button results in the system now  
25 creating a new profile that is an exact replica of the one used in the template.

To delete a profile from the system select the profile that one wishes to delete and simply choose the minus button on the toolbar. One will then be prompted to delete this profile. If one selects Yes than one will be provided with a list of all the buttons screens and videos that will be deleted when the profile is deleted. To still delete one chooses  
30 Delete Anyway.

Referring in particular to Figure 17 to edit the basic details for a profile one selects the profile to edit. To edit the description one simply clicks in the description field 366 and

begins typing. Once the editing is commenced the only buttons in the toolbar that may be accessed are the tick and the undo. This allows one to save and undo any changes. One may also edit the time period 368 that this particular profile is valid for. To simply choose a different time period we select the time period shown, such a lunch. To de-  
5 select a time period we then simply unselect it. The time period for which a profile is valid is a guide only and a waiter may choose to edit this time period as they wish.

We can also choose to edit the advertising theme for this profile, as shown in the drop-down box 370. Once all the changes have been made we select the tick which saves the changed for the profile.

- 10 Before a profile is available in the Host Podium for use in the Xerts restaurant it must be valid. To validate a profile we choose the profile maintenance tab to ensure that the profiles are on the front, select the profile to be validated and then press the validate button. This process may generally take some time. Once the profile validation is complete, the profile validation window is displayed. On the left hand side it will show  
15 you the status of each of the individual system of the profile that it checked. At the bottom it will tell you whether or not the profile validation has been successful. On the right hand side there is a list of all screens on the XOS. Any with the plus button may be expanded which shows further screens. In this case from Home there was one main screen for each of the main menu options. Each of these also has screens, such as  
20 the Drinks menu which itself may have other screens. The list then can continue to expand showing the buttons that are used within the screens.

#### Editing XOS Category Images

- To edit the category images one selects the Edit Category images button 374 for the relevant profile in the XOS Management utility, after selecting a profile. As shown in  
25 Figure 18 a new window 386 will appear showing a list of all XOS categories used in the XOS. These categories appear in the bottom left hand side of the XOS shopping cart and also in the selection screen. Each of these images is actually made up of two. The first image is the one that appears in the shopping cart, the second is the one that appears on the selection screen. To edit the image that will appear for a given XOS  
30 category first select the category you wish to edit, such as the kids menu 388, which will then show the current image as kids meals and then select from the drop-down box 390 where one will see a list of all category images 392 in the database, as shown in

Figure 19. Also shown in this Figure is the actual image 394 at the bottom right hand side of the window since we selected the show image button discussed earlier. To save the changes one presses the tick and simply exit the window.

#### Editing Profile Time Periods

- 5 To edit an available time period one selects the edit button 396 to the right of the time period area of the profile maintenance button, and wherein the time maintenance form will then appear. This is illustrated in Figure 20 where on the left there is a list of all current time periods 398. To the right there is the description 400 for the start for that period. To add a profile to the time periods, press the plus button, enter a description, 10 such as a Morning Tea period, then enter a start time 402, such as 9:30 and an end time 404 such as 11:45. Once we have entered the details they are confirmed by pressing the green tick so that the record has now been saved.

- If one selects edit again, we can return to the Time Period Maintenance form. Say the operator wants to change from Morning Tea to Morning Coffee, they can do so in the 15 description, by selecting the green tick and close the form once again. One can appreciate that the changes have been applied and Morning Tea has been changed to Morning Coffee. If one selects edit again the operator can delete time periods, such as the Morning Coffee period. So selecting the minus button (usually pink), confirms the delete and once again exits the form. The new time period has been deleted.

#### 20 Editing Screens

- In the layout of the edit screens window one may edit the screens for a profile including adding, deleting, or changing a screen. The Screen editor is brought up by selecting the edit screens button 372 that bring up the display 406 as shown in Figure 21. On the left hand side there is the grid 408 that lists of all screens available for this profile in the 25 XOS. On the right hand side we see all the details of this particular screen. Included are a description 410, a notes field 412 telling us when a profile was created, and whether it was created using a template. One can enter any other appropriate notes. There is also defined the type of screen 414, and a home screen field 416. It is important to note that this home screen field will only be available when the screen type is set to home 30 and that only one screen profile may be selected as the home screen.

Down below there are items for a video, if appropriate. If the screen has an introduction in the navigation video we need to enter the introduction times 418. If the screen itself



is in the navigation video one needs to enter the times 420 in the video that the screen is shown. Finally if the screen has any exit video one needs to enter the times 422 of those as well.

On the right hand side the operator needs to set the source file 424 that is used in the  
5 XOS to display this screen, a style sheet 426, if appropriate a background image 428 and a background sound 430. Further if there is a sound theme one needs to select a sound theme 432. If it is a menu it will need to have a XOS category 434. This XOS category is used so that whenever any food is ordered from the menu is added to the shopping cart and also the selection screen.

10 One has an option to enter the help 436 that will be displayed at the bottom of the XOS for this particular screen and also an incidental screen 438. An Incidental screen appears when the type of screen is menu and is a video that will play after the user clicks the screen a random number of times whilst in the current screen, generally between 5 and 15.

15 Different main types of screens include the menu, the navigation screen including home, here one can see and also the use of the background image, which is the navigation video.

#### Editing Buttons on Navigation Video Screens

A typical navigation screen 440 is shown in Figure 22, together with its buttons. To edit  
20 the buttons for a navigation screen within a profile one first selects the screen from the grid on the left hand side of the screen editor menu, in this case to edit home, then selects the Edit Buttons button.

As shown in Figure 22, one sees a copy on the left hand side of the screen 442 within the navigation video. It is paused on the first frame of that screen. Each of the boxes  
25 444 represents a virtual button on the navigation video. The highlighted box 446, usually in green on a screen, is the one currently selected over in the navigation button editor. In the navigation button editor 448 one can select the screen 450 that this button links to, that is the screen that the XOS will navigate to once this button has been pressed, the X, Y, height and width 452 which are determined by dragging and  
30 dropping a new box size, and also the sound 454 that is played when the button is pressed. There is also disabling if no order option 456. When selected the user will be unable to press this button until they have ordered food or drink from the XOS. The

navigation buttons may select the buttons by simply pressing on them and therefore see the details on the left hand side. One may edit and delete buttons as one would in any other screen.

To create a button on a navigation screen first select the part of the video, as this is the screen that one wishes to add the button to. If, for example home was selected then the operator needs to select the Edit Buttons button. Here one can see all of the buttons currently enabled on the video. They are shown by square, with the highlighted or green colour square the one currently selected. To add a new button, one selects the plus button and then simply clicks and drags to insert a button, the new button 458 shown in Figure 23 with its details shown in the navigation button editor screen on the right hand side

Once a button has been created one needs to link it to a screen such as a training screen. One may also apply any sounds to this button and also decide whether or not this button will be disabled if there is no order. Currently Fun, XertsTV and Shop are disabled unless the customer orders food or drink. Once satisfied with the new button select the green tick and then close the window whereby the operator is returned to the screen editor window.

To delete a button for a navigation screen one first selects it and then simply deletes it by pressing the minus button. A confirmation menu will then appear. Press yes to confirm the deletion, and the changes will now be saved and the button deleted.

To edit a button in the navigation screen, one selects the button to edit. The button will be highlighted and any details in the navigation editor can be changed, such as disable if no order. Simply dragging and dropping a new box over the top can change the size of the box. The changes can then be confirmed and saved by pressing the green tick.

## Advertisements

An advertising profile is a collection of advertisements that play for a particular XOS session. This advertising profile is set for each available XOS profile. Thus a XOS profile for children can have different advertisements playing than those in a profile for adults. The collections of advertisements that play within an advertising profile are broken into logical groups. For example all beer advertisements may be placed in one group wherein all wine advertisements may be placed into another. One creates these groups using the Advertisements Group area in the System maintenance tab. It is

important to note that only advertisements belonging in a group can be played in the XOS.

With the current flexibility of the system one can select where and when in the XOS the groups of advertisements can be played. When based on a group of pre-defined time periods and based on the category of the screen that the XOS is currently on, one can select where the advertisements will play. For example the operator may decide that can say that between six and nine pm whenever the XOS enters the category beers and sodas the system will play beer advertisements. However between 10 am and 3 pm when in the category beers and sodas, play soda related advertisements. There is also a special systems category for whenever the XOS screen that is currently being viewed is not applied to a category. For example Home does not have any particular Micros category, as does either the help video or the selection screen. Thus screens such as these will simply view the default system advertisements. Therefore advertisements in the system area will usually get more play than any others.

Other options may also be set such as the play order of the advertisements in a particular group. For example one can select whether our beer advertisements to be played between 6 and 9 pm are to be played in a particular order or whether they are randomised. The operator can also select for a particular category whether they want to play purely a group of related advertisements, for example just play beer advertisements between 6 and 9 or whether or not we want to go 50/50, beer advertisements versus system advertisements. By selecting 50/50, whenever there is a beer and a soda screen the system will start with the beer advertisement then one of the system advertisements followed by another beer advertisement and another system advertisement etc.

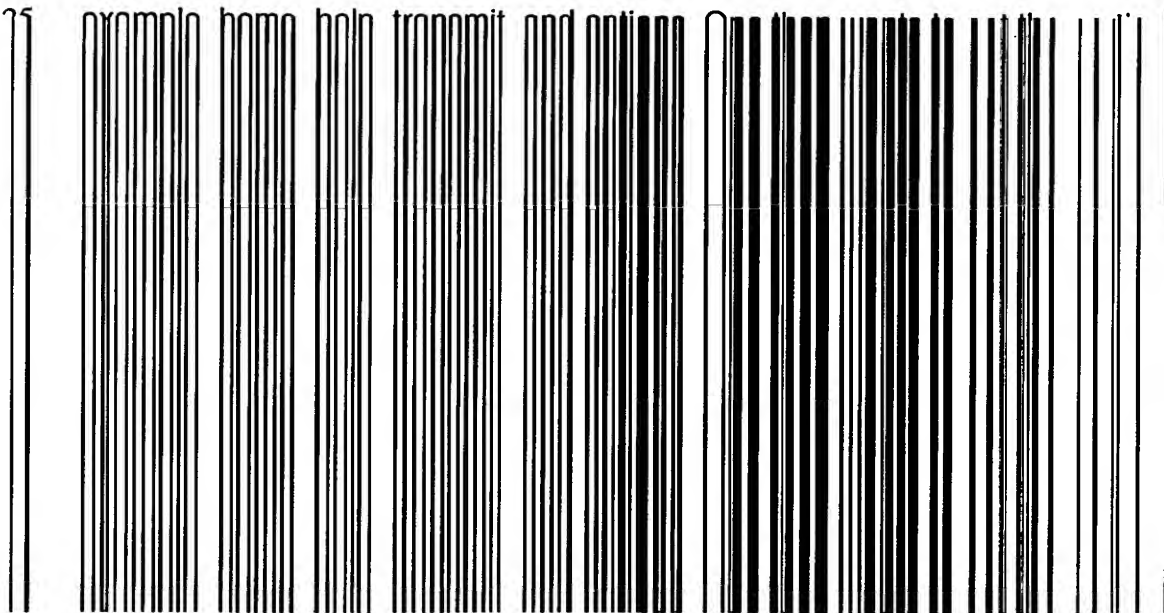
These options are decided in the Advertisement Profiles section of the XOS Content Management Utility

#### Advertisement Profiles

To edit the advertisement profile under the System Maintenance Tab one selects the Advertisement Profile button 336. This will open the advertisement profiles window 460 illustrated in Figure 24. On the left hand side there is a grid 462 containing all current advertising profiles. The rest of the screen shows the details for the particular profile chosen. Within each profile one can pick the time period 464 and the category 466 a

particular advertisement group 468 will be shown. Thus the for the April 2000 profile, Pizzas play the Wine advertisements all day. The time period may be edited to include extra time periods, however, the time periods that are created must never overlap and must cover the full 24-hour period. To edit the time period one must first delete all the current advertising profiles. To select a particular time and place for a particular group to play one first selects the category in which the group will be playing and then selects the group that one wishes to display. When a group has been selected one must also select a ratio 470 which can be either 50/50 or 100/0. If one selects 50/50 this means that when there is a particular screen the selected advertisement group will play 50% of the time and the system advertising will play the other 50%. There will then be one group advertisement followed by one system advertisement, followed by another group advertisement. If 100/0 is selected only the particular group advertisement selected will play. Note that there is only one group per category per particular time period. A check box for this group also enables random order playing of the advertisement. This is done the first time they are transferred to the XOS. These can be viewed by Edit Advertising button, which will show the order in which the advertisements will be played. After all the advertisements are played in their order, the group continues to cycle through its records. To exit this window the operator selects the close button. Any changes that are made have to be confirmed by the tick or undid by the undo button.

To add a new advertising profile one selects the plus button and gives the new profile a name. Once having entered a description one must set when and where each of the advertising groups will be played. It is important to note that one must always set an advertising group for the System category and this must cover the full 24-hour period. The system category covers all screens that are not linked to a Micros category, for



To delete a profile, one selects the profile and then selects the minus key. A confirmation window will then appear. Upon confirming that the profile is to be deleted it will be removed from the database.

To edit a profile or advertising theme one simply selects the profile that is to be edited.

- 5 The description field can be edited by simply typing into it. One can also change the advertisements that appear in each of the categories by simply selecting a new advertisement. Once the changes have been made, the tick is pressed saving the changes.

#### Advertisement Groups

- 10 To edit the advertisement groups the operator selects the Advertising Groups button 338 under System Maintenance tab that will bring up the Advertisements Group Form 472 illustrated in Figure 25. In this form on the far left there is a list 474 listing current advertisement groups, in a grid format. The center window 476 shows all the current advertisements that are not shown by this particular group whilst in the far right 478
- 15 there are listed all the current advertisements that are used in the current group. Selecting one of the advertisements and using the up or down buttons 480 one can change the order in which these advertisements appear. This order is also the order in which the advertisements will be played in the XOS, unless the advertisements are set to appear in a random order.
- 20 To add an extra advertisement to a group one selects that advertisement from the centre window and then uses the right hand arrow 482 to move it to the listed group. Note that advertisements only appear in one window, not both. To move it back again one selects the left hand button 484. To remove all the advertisements from a group one uses the double left arrow 486.
- 25 To add an advertising group, the operator selects the plus button and then enters a description into the description button. One then needs to add advertisements to this group from the centre window and move them to the right window. To move the advertisements into the correct order one uses the up and down arrow whilst an advertisement has been selected. Pressing the tick saves the changes to the database.
- 30 To delete a group one first selects the group and then the minus button. When prompted one presses yes to confirm which results in the record being deleted.

To edit an advertisement group, one selects the group to edit. Then one may edit the description by just typing into it. Items may be removed from the group by selecting an advertisement on the far left-hand side and pressing the left arrow. Items can be selected by moving them to the right window using the right button. Once all the changes have been made one selects the tick and all the changes will be saved onto the database.

The person skilled in the art will appreciate that the present invention relates to a Web based system that accommodates for different languages/customs. All content in the XOS is located in files and may either be graphical, textual or a combination or both.

In the particular embodiment described above, the system currently uses a three-tier or hierarchical menu structure to allow customers to navigate through the system. IN the present embodiment the first two layers are clickable video and are used purely for navigation to lower menu levels, while the third layer is a cold fusion page, displaying the products that a customer may select. This layer structure is flexible, and may expand or contract at any time without code changes.

Other changes may be made to the present invention whilst still falling within its scope., Therefore, whereas the above description related to visible profiles the system could equally well be used on audio profiles or shape profiles.

Although the invention has been shown and described in what is conceived to be the most practical and preferred embodiment, it is recognized that departures may be made therefrom within the scope and spirit of the invention, which is not to be limited to the details disclosed herein but is to be accorded the full scope of the claims so as to embrace any and all equivalent devices and apparatus.

Dated this 27th day of August 2001

Xerts International Limited  
By their Patent Attorneys  
Lesicar Perrin

**THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:**

1. An interactive user ordering system including:  
a user interface having a display screen with display information shown on said screen  
for the user to utilise in making a selection, said display information including a plurality  
5 of indicia forming a profile, each indicia displayed at a pre-determined location on said  
display screen;  
at least some of said indicia being selectable by the user and related to a specific  
request;  
said system having a plurality of profiles where indicia from different profiles displayed  
10 at the same location represent the same request.
2. An interactive user ordering system as in claim 1 including a central server  
coupled to said user interface for storing a plurality of profiles and including a selection  
means enabling an operator to select a profile to be displayed by said user interface,  
said selected profile transmitted to the user interface.
- 15 3. An interactive user ordering system as in claim 1 or claim 2 wherein there is a  
two-tier structure of indicia in that selecting one indicia displays to the user a second  
set of indicia, said second set forming part of the same profile.
4. An interactive user ordering system as in claim 3 wherein there is a third-tier  
structure of indicia wherein selecting an indicia from the second set displays to the user  
20 a third set of indicia.
5. An interactive user ordering system as in any one of the above claims wherein at  
least some of said indicia are graphical images.
6. An interactive user ordering system as in claim 1 or 2 wherein at least some of  
said indicia are audio/visual files.
- 25 7. An interactive user ordering system as in claim 1 or 2 wherein at least some of  
said indicia are text files.
8. An interactive user ordering system as in any one of the above claims wherein at  
least some the indicia are chosen from the type consisting of but not limited to foods,  
beverages, games, information, personal services.
- 30 9. An interactive user ordering system as in any one claims 3 to 10 further including  
static indicia that are displayed regardless of the tier indicia displayed.

10. An interactive user ordering system as in any one of the above claims wherein profiles include indicia graphically representing different languages.
11. An interactive user ordering system as in any one of claims 2 to 11 wherein the operator selects different profiles to be displayed depending on the relative time of day.
- 5 12. An interactive user ordering system as in any one of the above claims further including at least one advertising profile, said advertising profile displayed on the display screen only when the user has selected a pre-determined indicia.
13. An interactive user ordering system as in claim 12 wherein said advertising profile is displayed at a pre-determined location on said display screen.
- 10 14. An interactive user ordering system wherein said advertising profile includes displaying information related to the indicia selected by the user.
15. An interactive user ordering system as in any one of claims 12 to 14 wherein said advertising profile is displayed according to the time of day.
- 15 16. An interactive user ordering system as in any one of claims 12 to 15 wherein said advertising profile includes files selected from the group including graphical files, audio/visual files and textual files.
17. An interactive user ordering system as in any one of the above claims wherein said indicia are embedded in a video.
18. An interactive ordering systems as in any one of the above claims where there are a plurality of user interfaces.
- 20 19. An interactive ordering system as in claim 18 wherein said user interfaces are video display terminals in a restaurant.
20. An interactive ordering system as in any one of the above claims wherein said user interface includes a computer program product and a computer system including a video monitor, a central processing unit, and means coupled to the central processing unit for storing a database containing the indicia displayed to the user.
- 25 21. An interactive user ordering system including:  
a user interface having a display screen with display information shown on said screen for the user to utilise in making a selection, said display information including a plurality  
30 of indicia forming a profile, each indicia having a unique identification means and being



displayed at a location on said display screen;

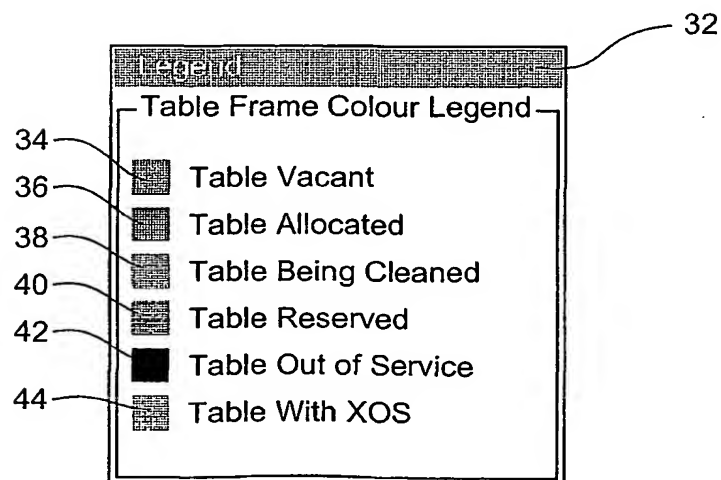
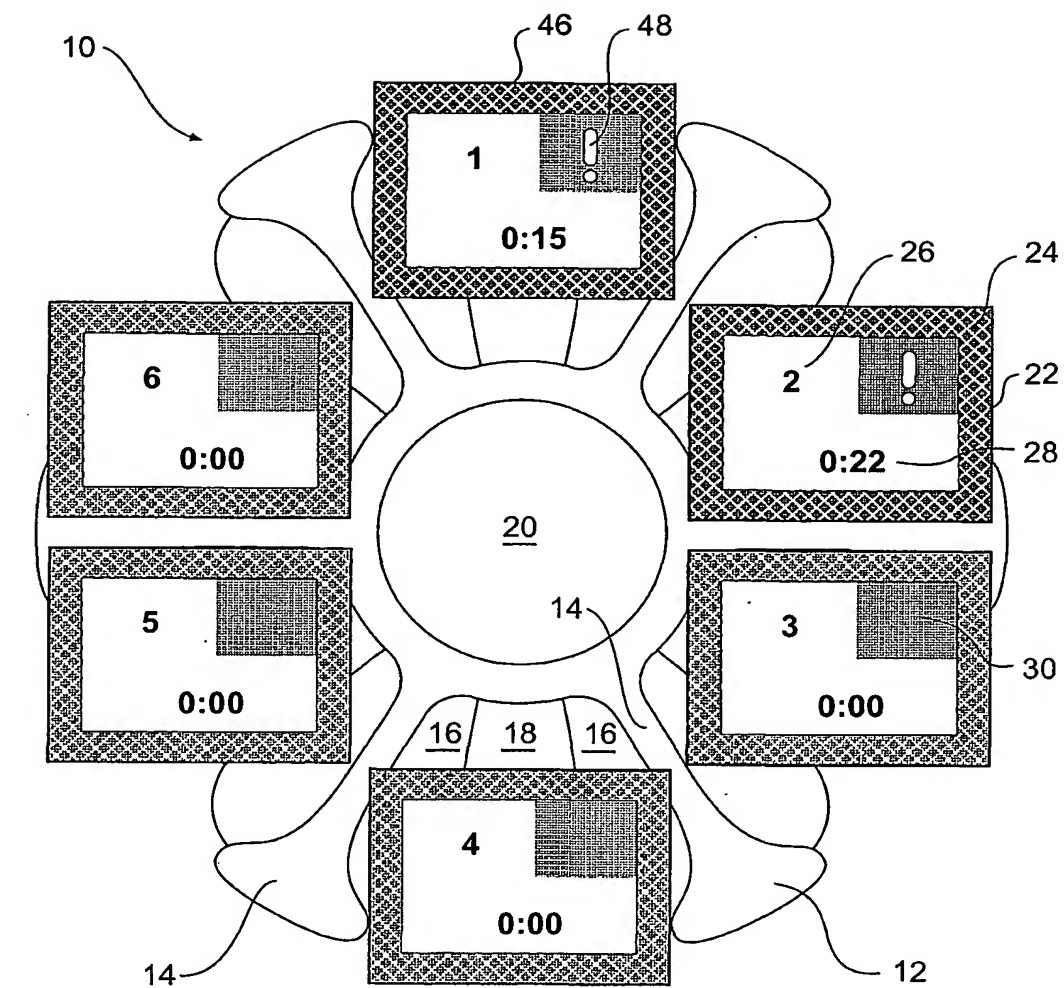
at least some of said indicia being selectable by the user and related to a specific request;

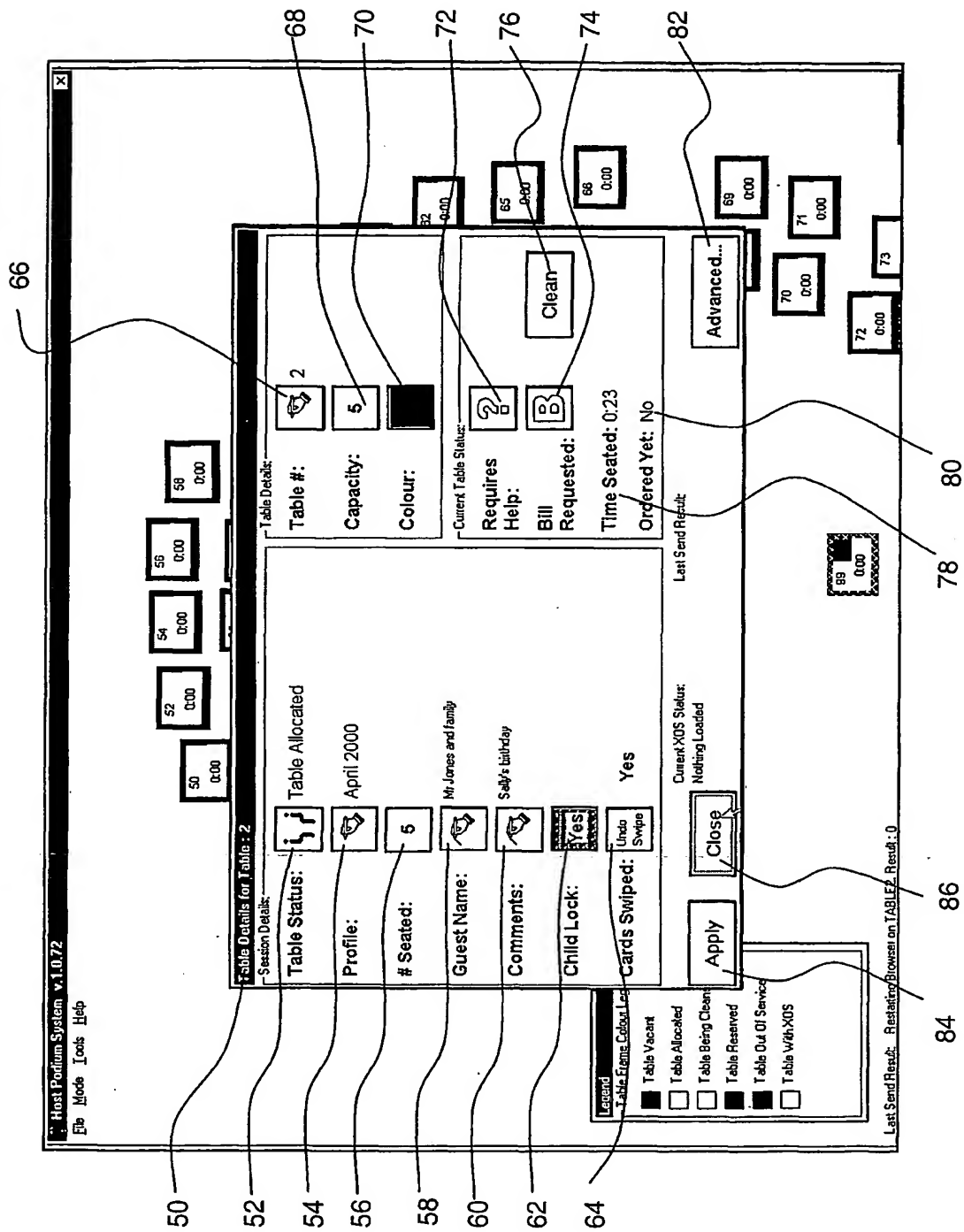
said system having a plurality of profiles where indicia from different profiles represent the same request and share a common unique identification means.

22. A method of providing a user with an interactive ordering system said method including the steps of:

creating a first profile having a number of indicia, each indicia representing a different request and having an identification means;

creating a second profile having a number of corresponding indicia, each indicia representing the same request as in the first profile but being visually different to the indicia in the first profile.

**Fig 1**



54

Table Details for Table : 2

Session Details






Table Status:  Table Allocated


Table #:  2


Profile: 


































Profile Selector  
April 2000 - 90  
Japanese language - 92  
Lunchtime menu - 94

# Seated:  0

Guest Name: 

Comments: 

Child Lock:  Yes

Cards Swiped:                                 

Clean

Advanced...

96

Current XDS Status: Shutdown Complete

Undo Swipe

Ordered Yet: No

Last Send Result

Apply

Close

Fig 3

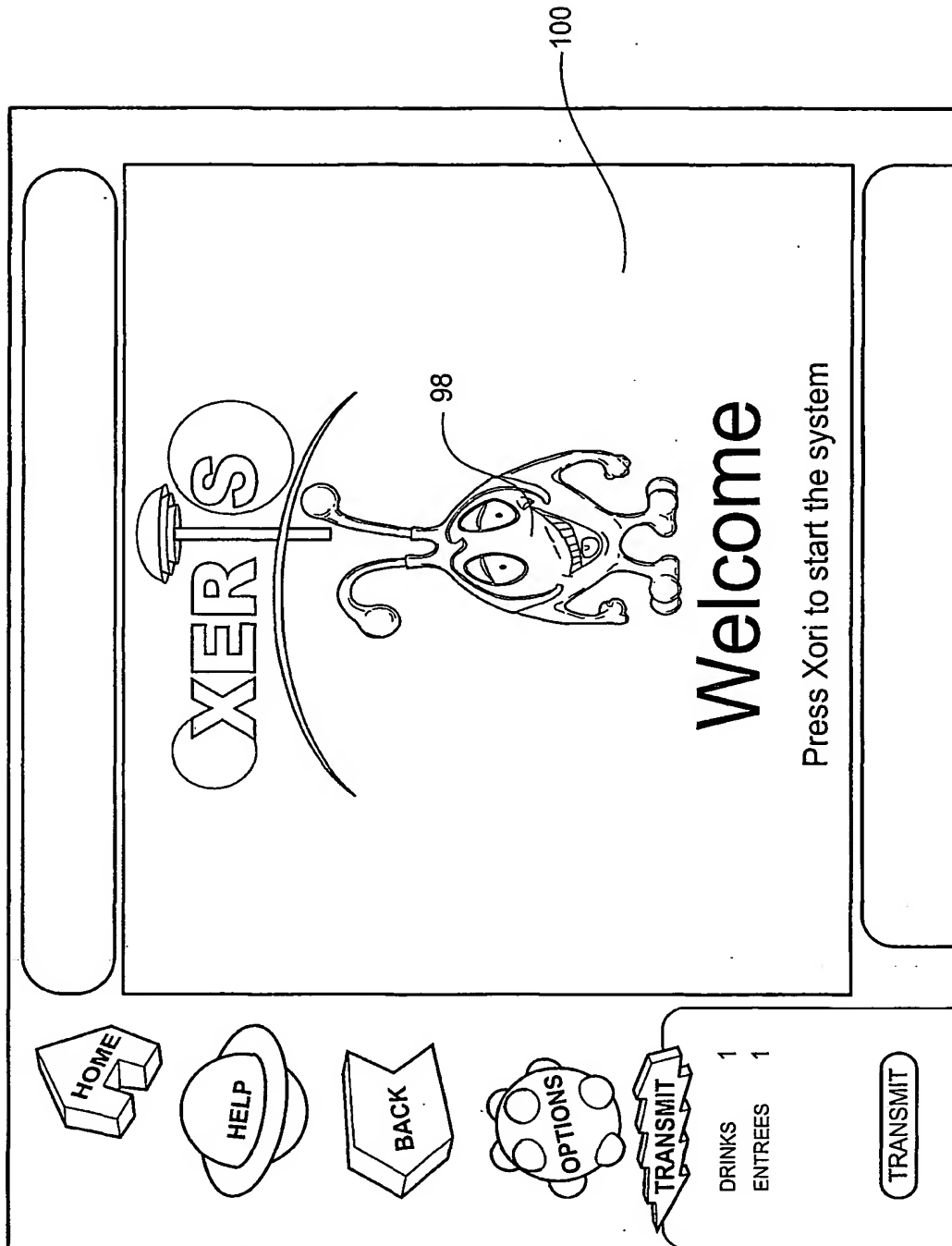
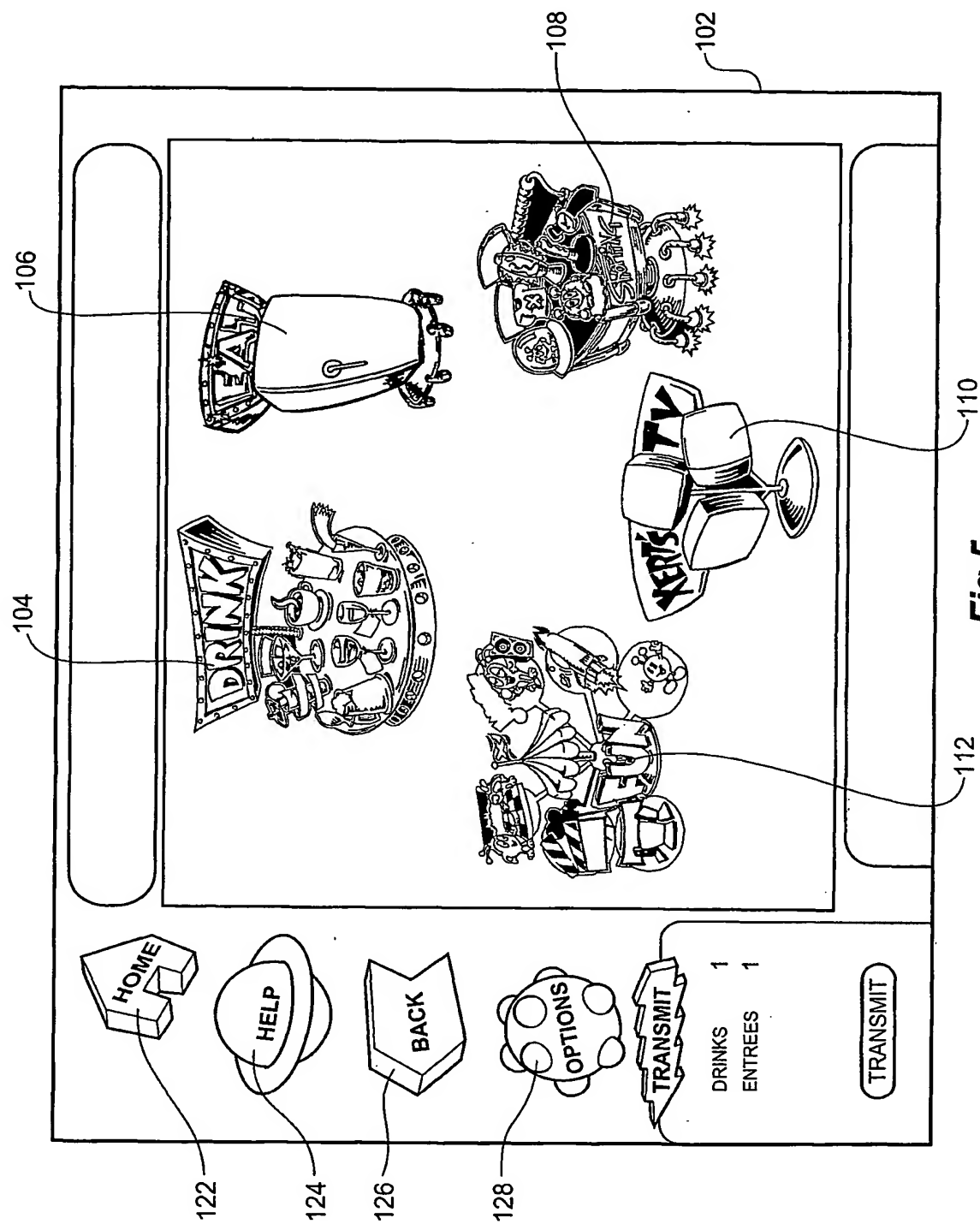
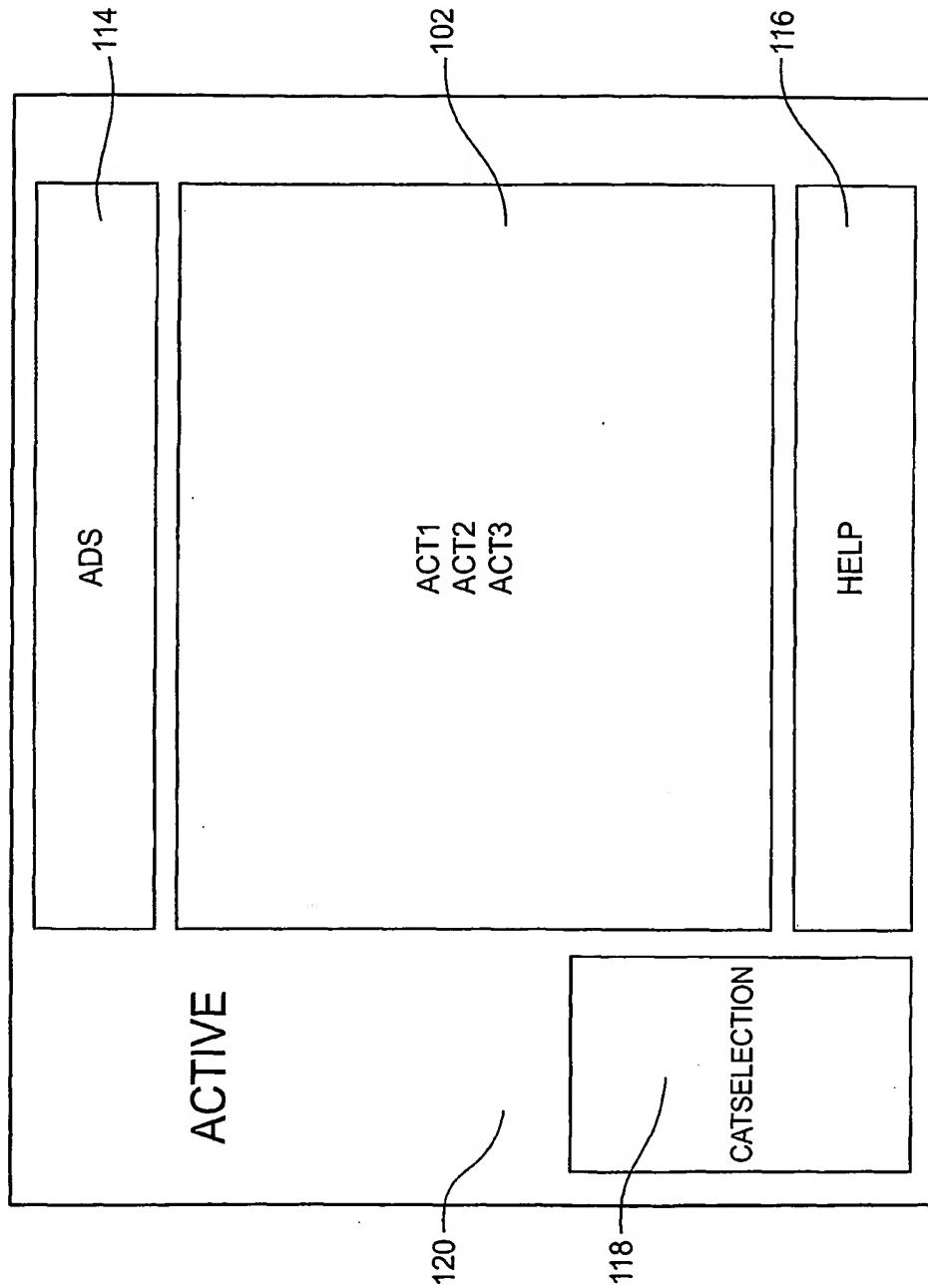


Fig 4





**Fig 6**

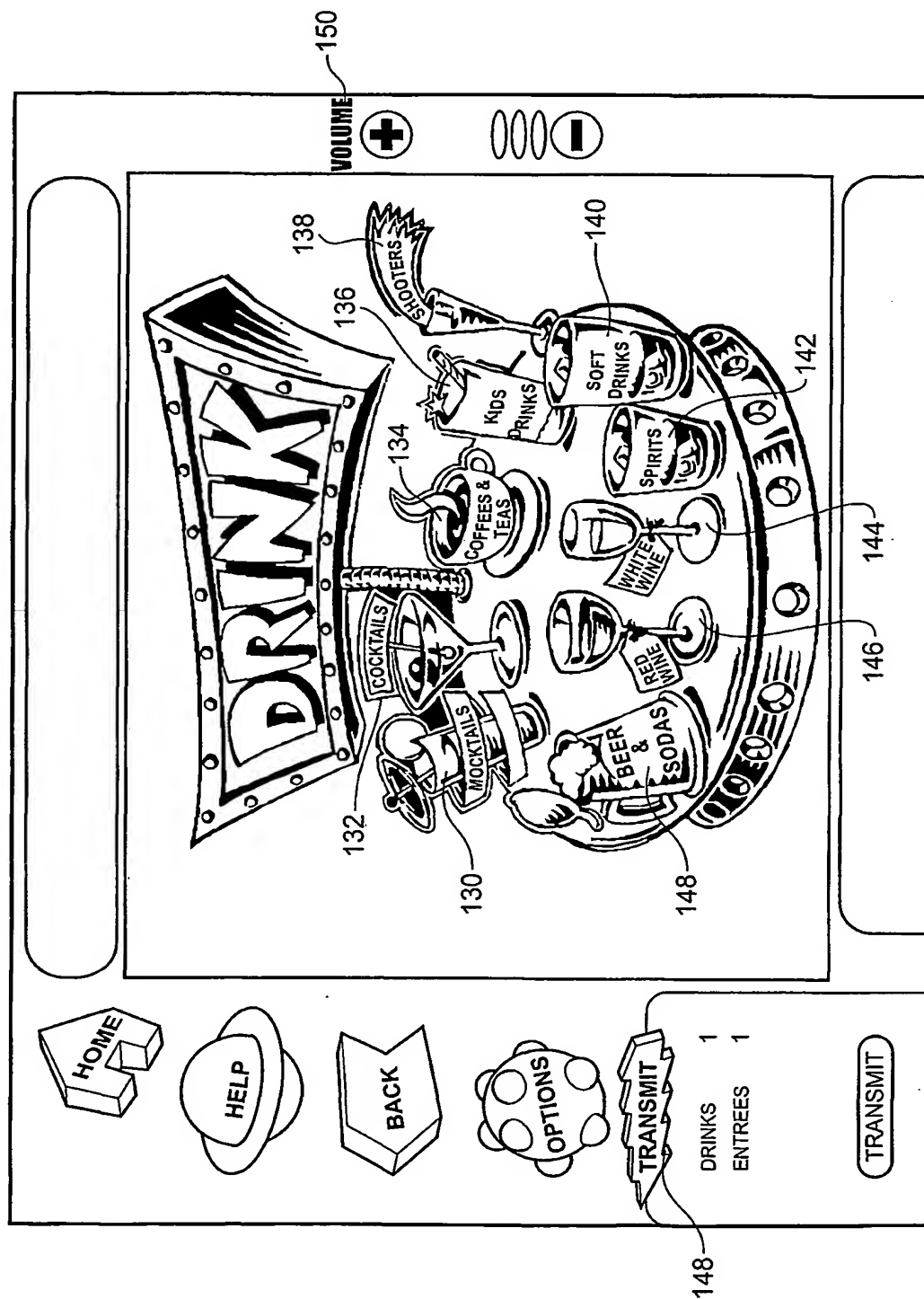


Fig 7



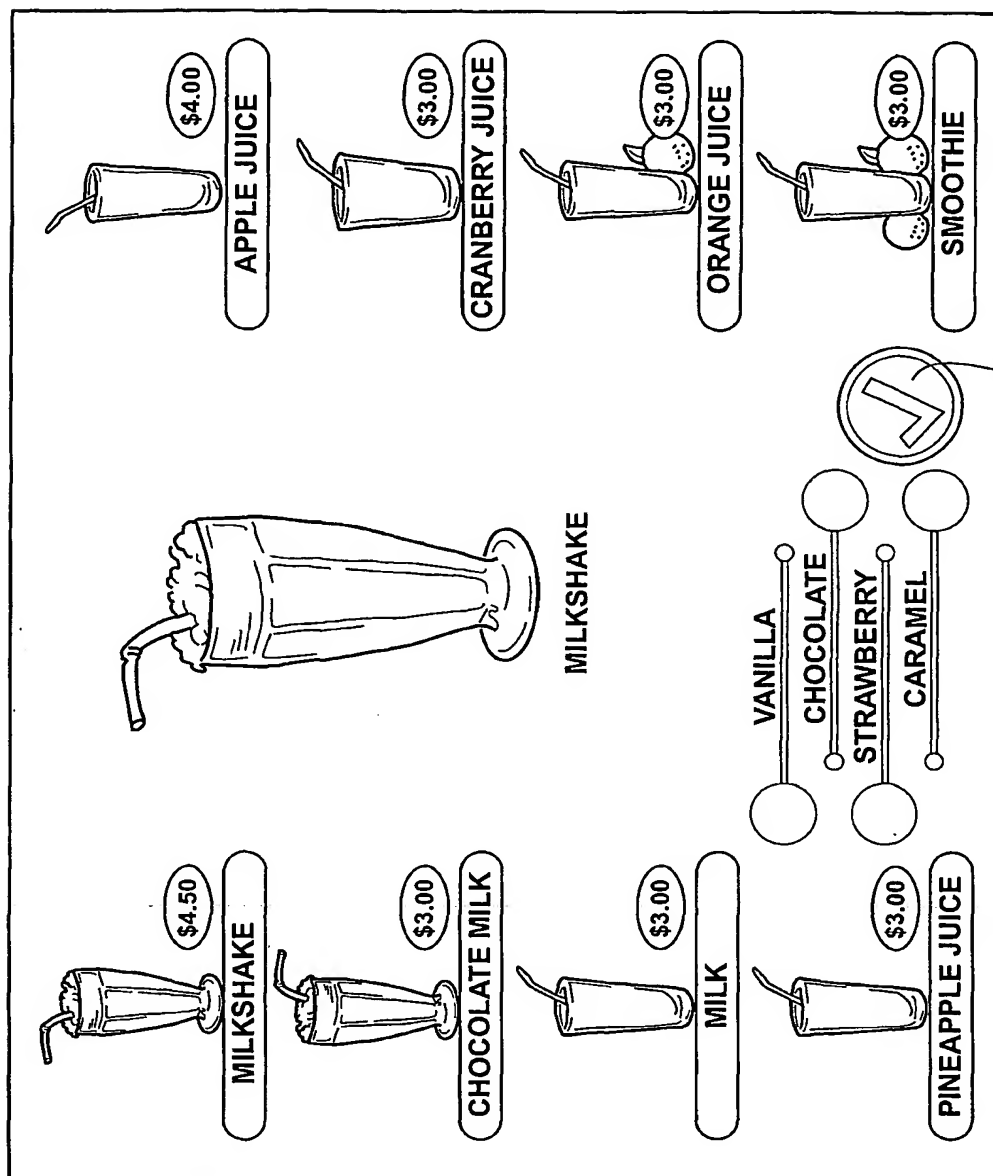


Fig 8

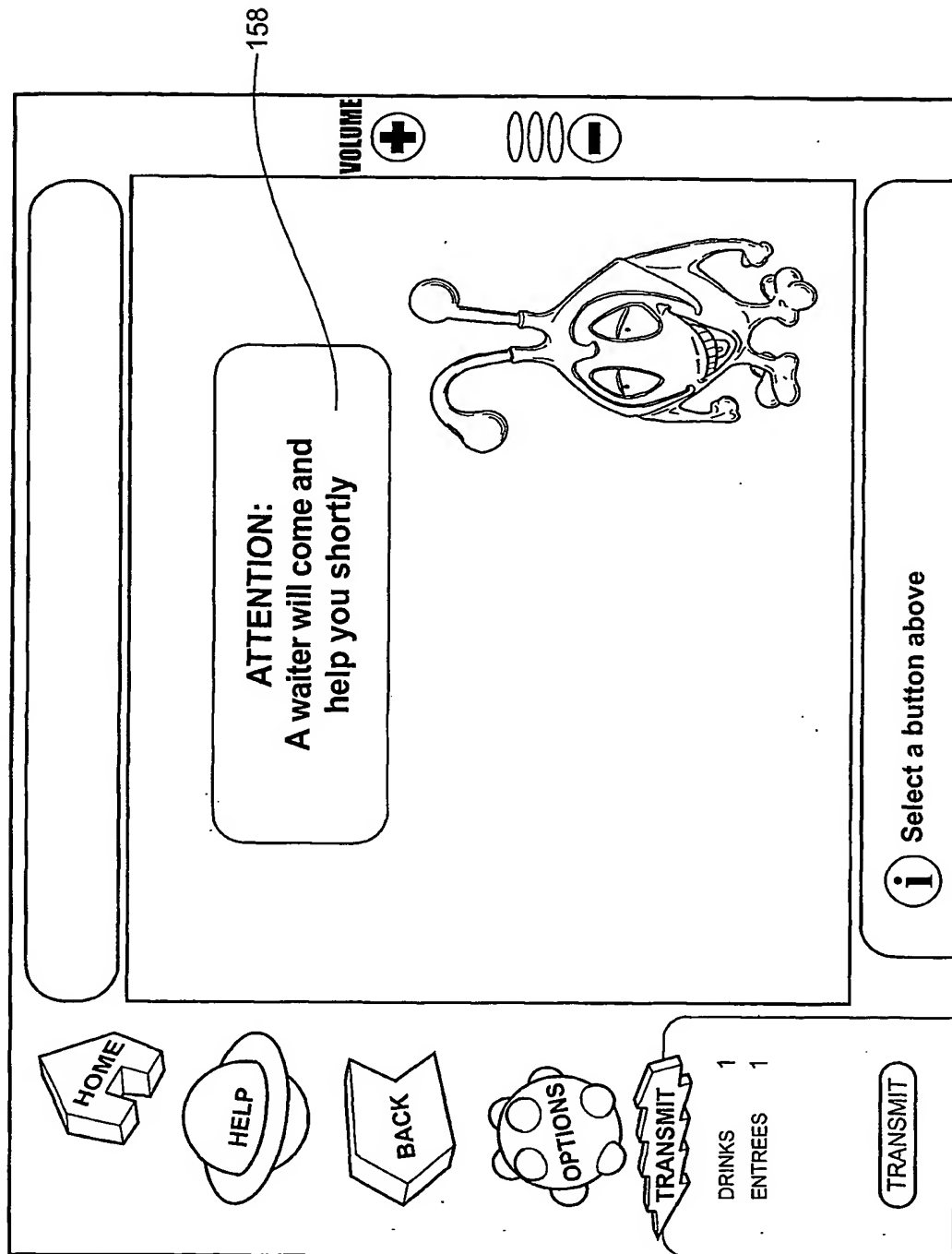


Fig 10

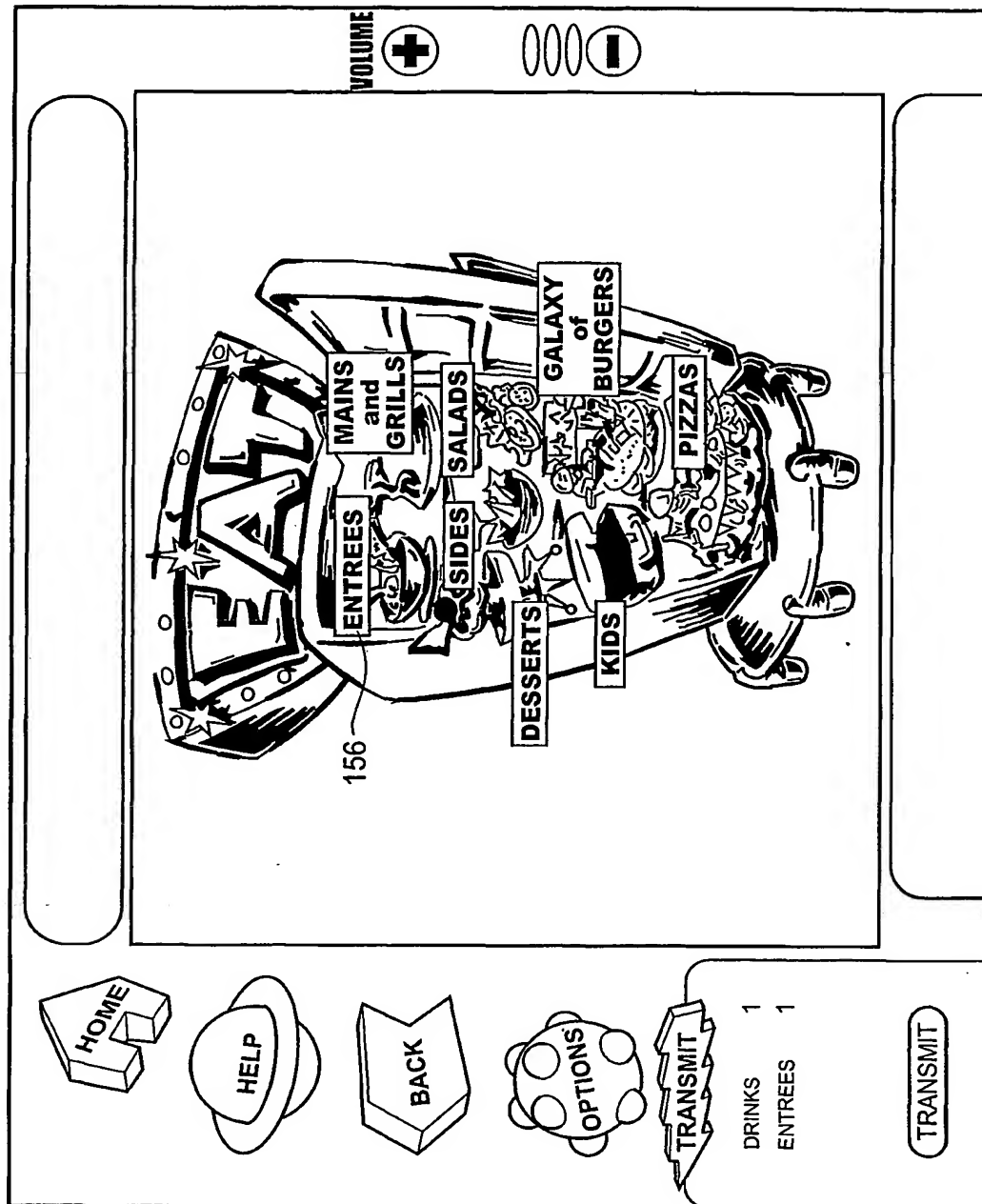


Fig 9

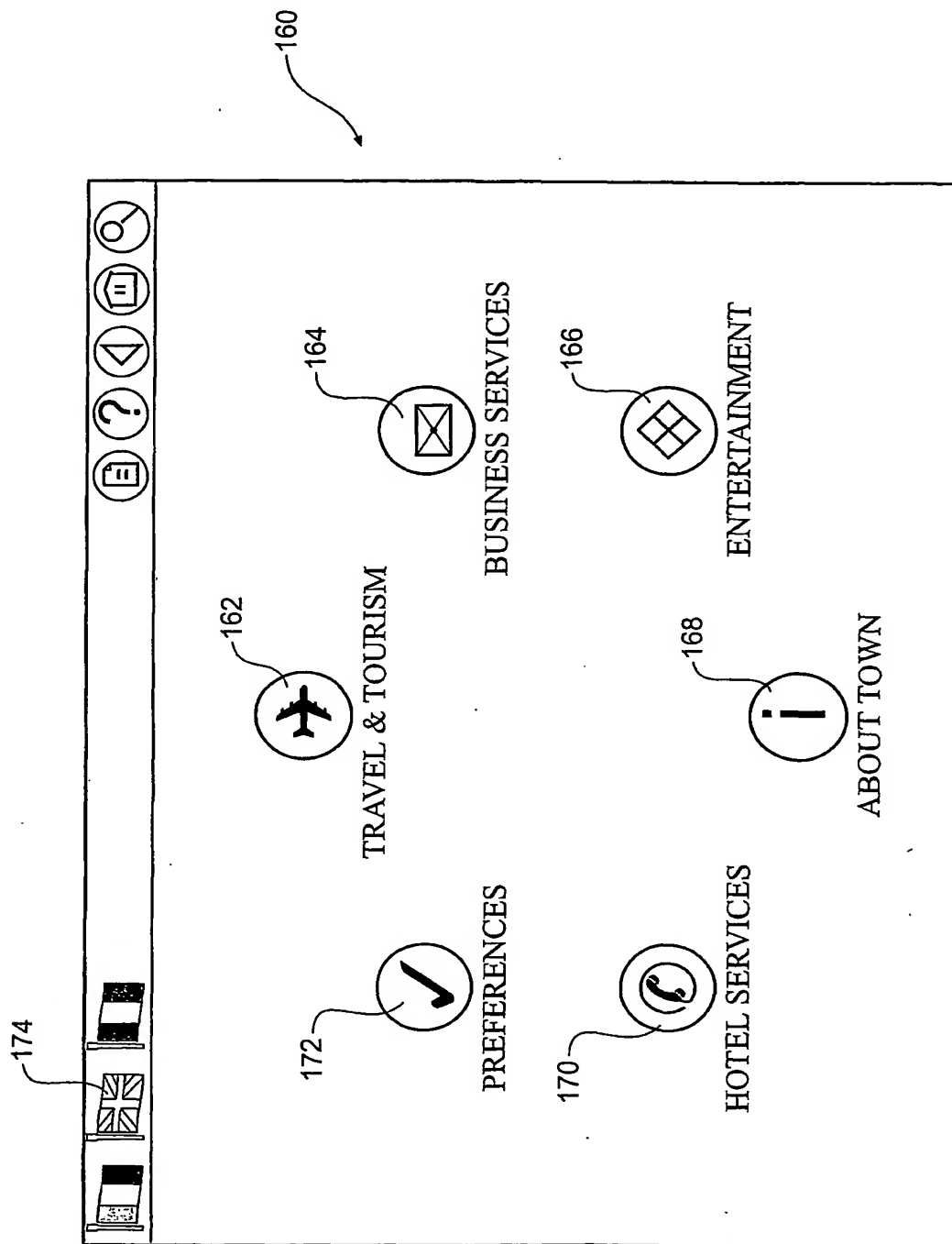


Fig 11

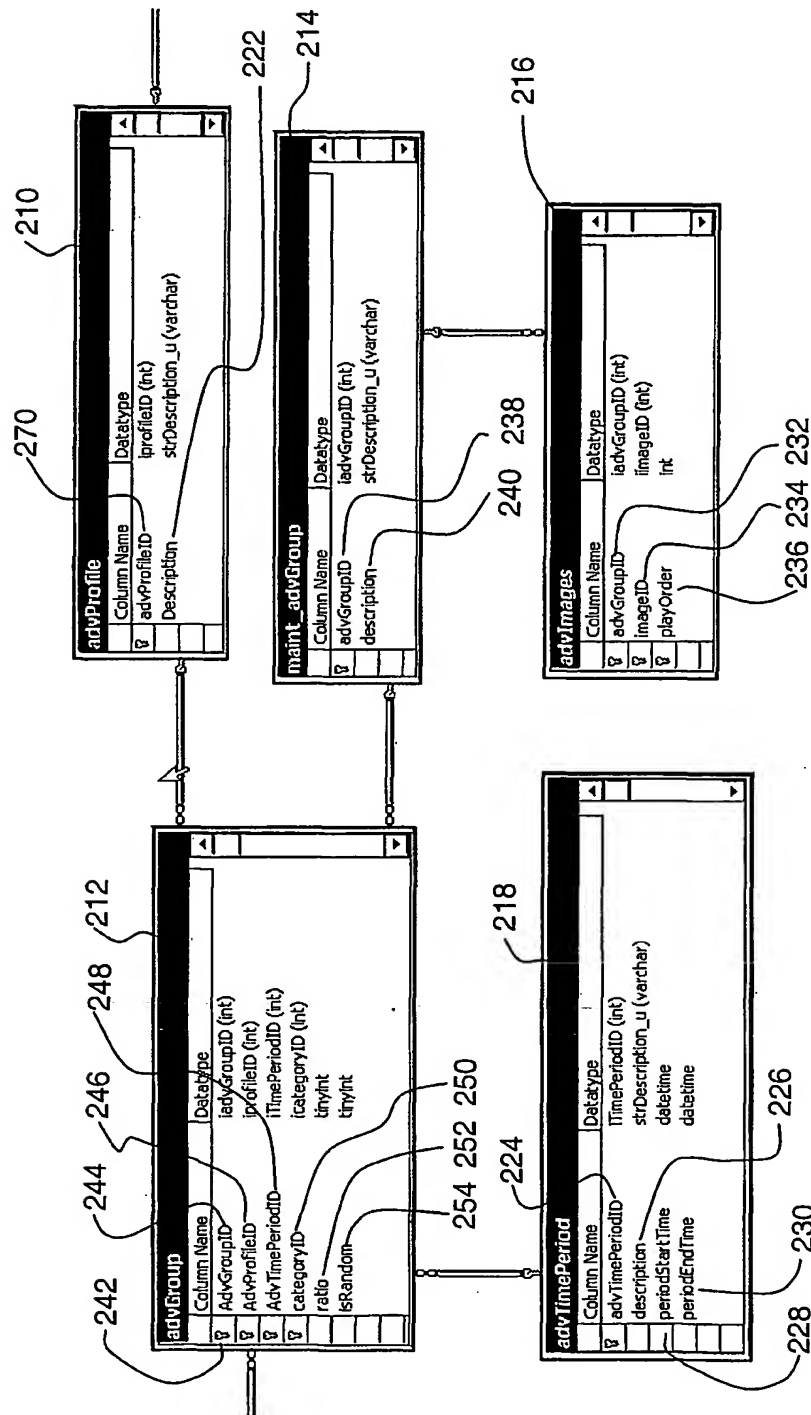


Fig 12

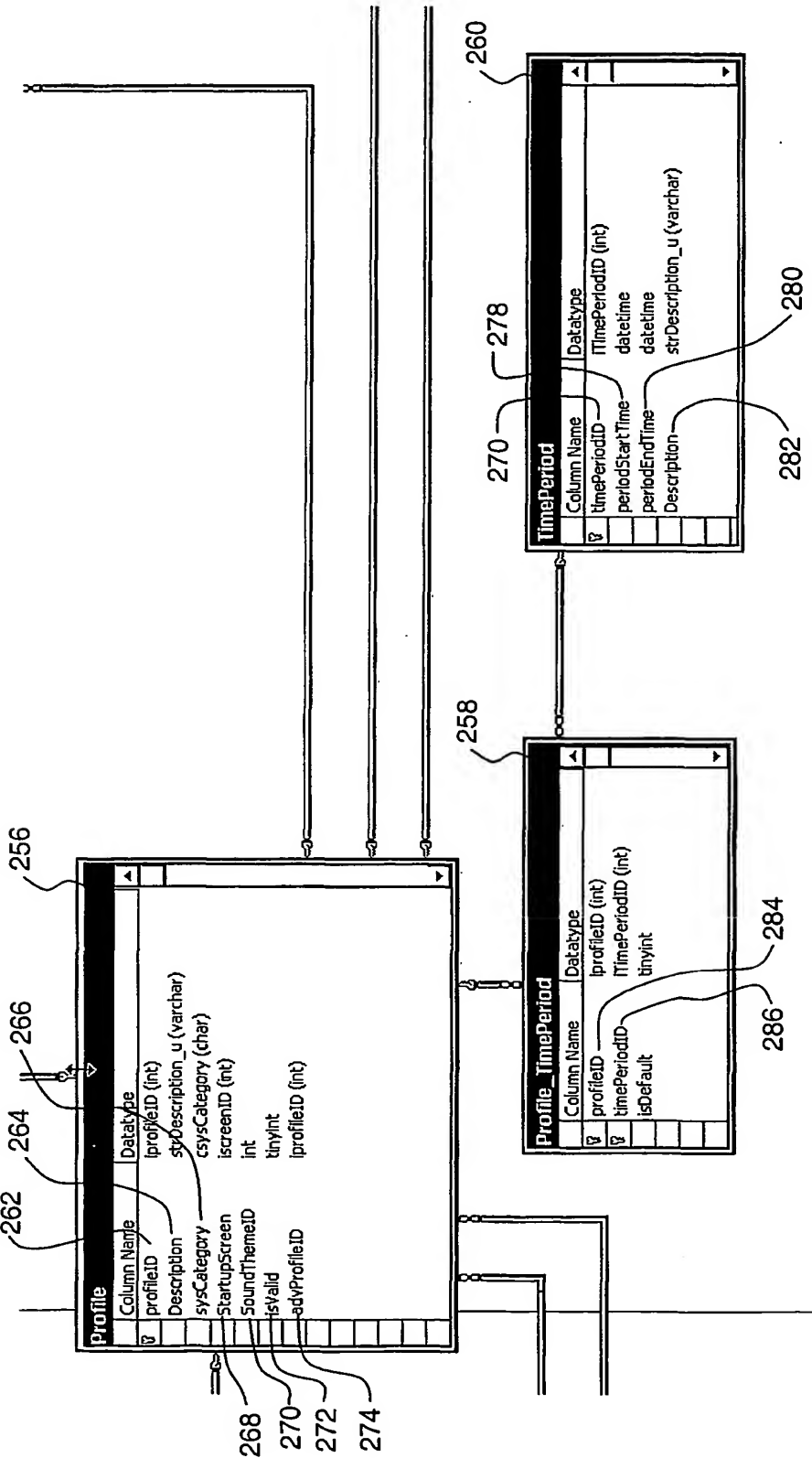
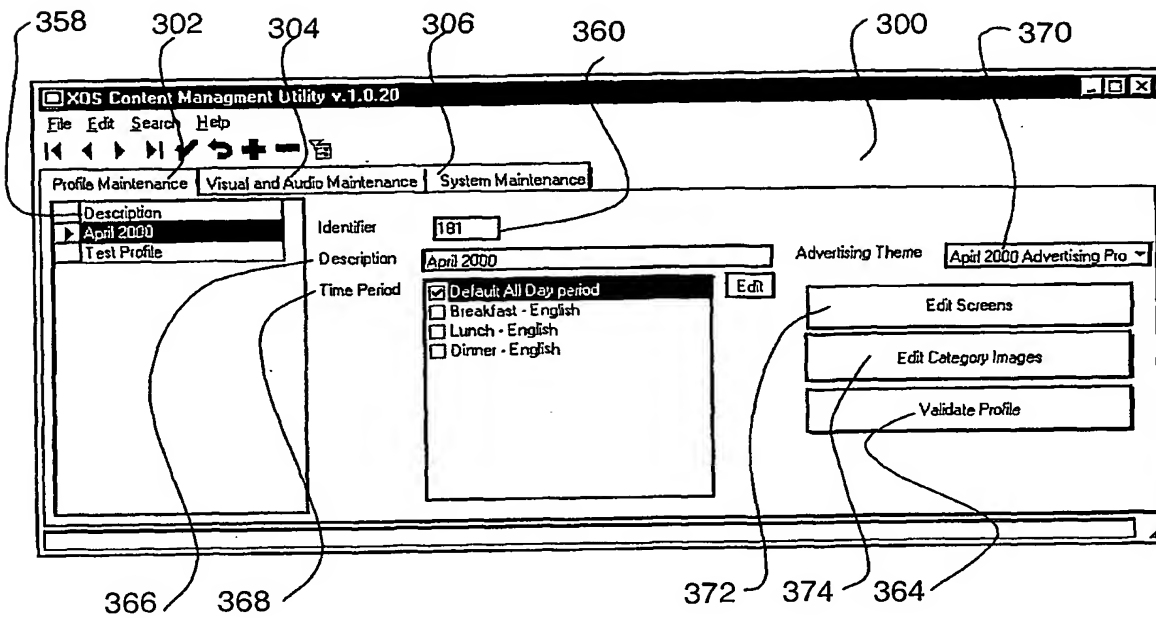
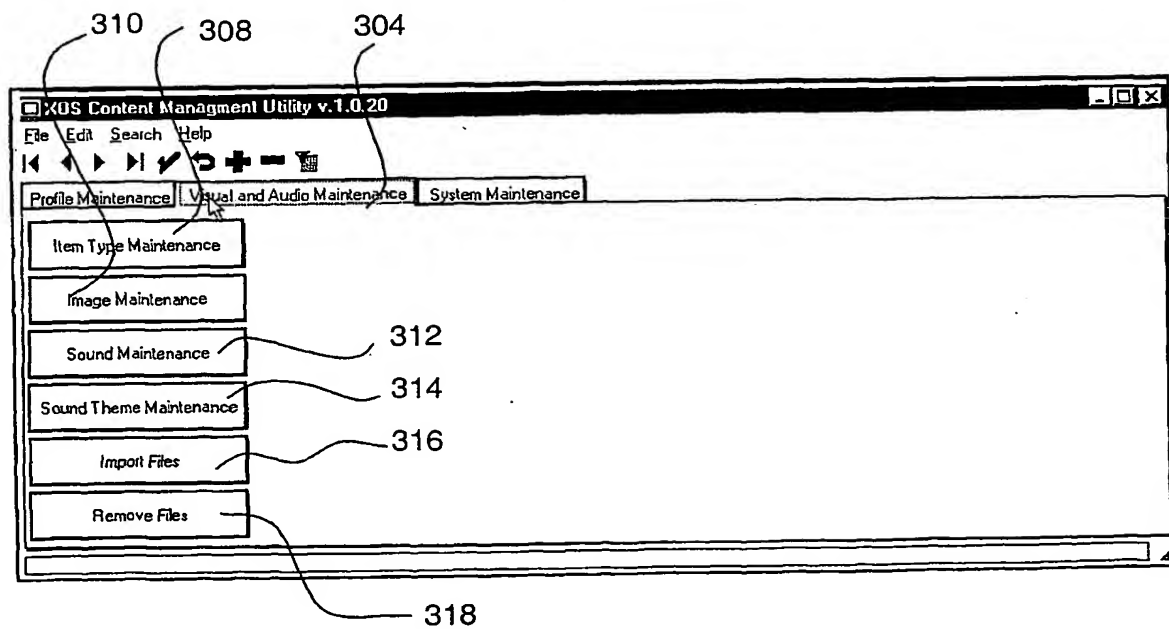


Fig 13

**Fig 14****Fig 15**

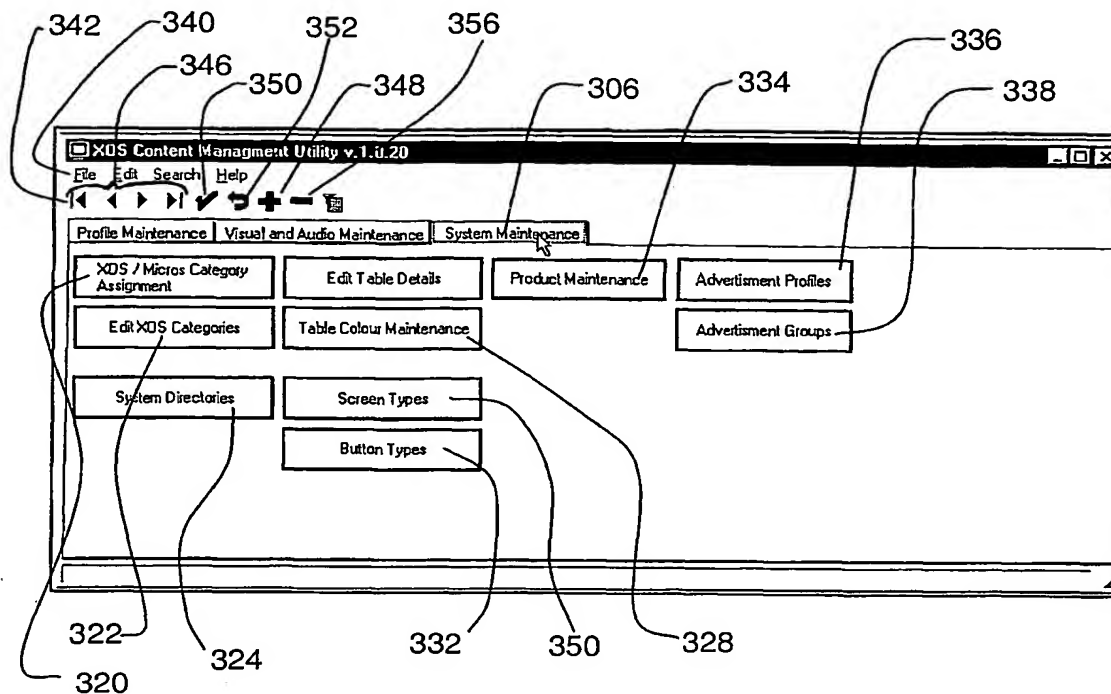


Fig 16

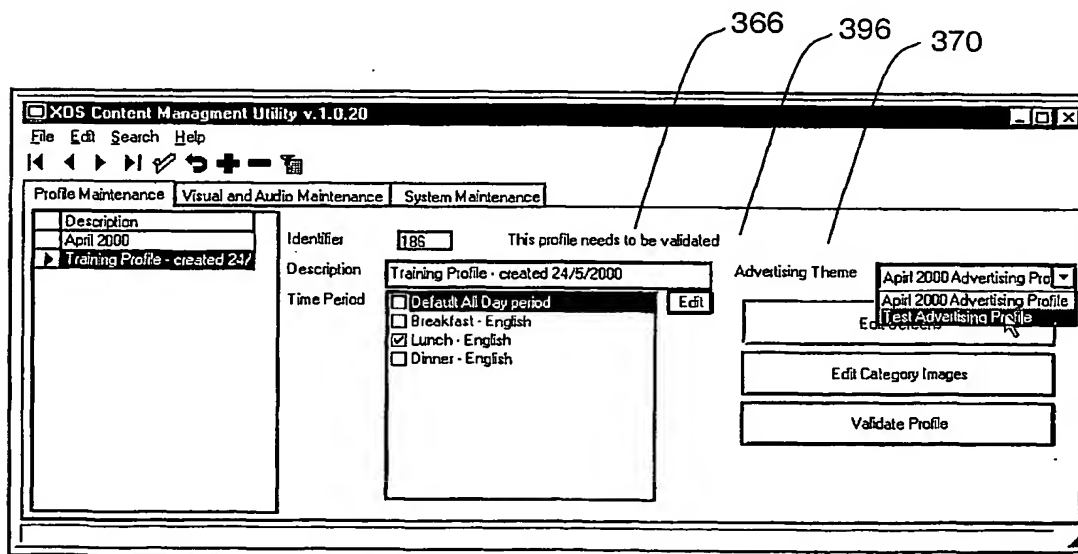
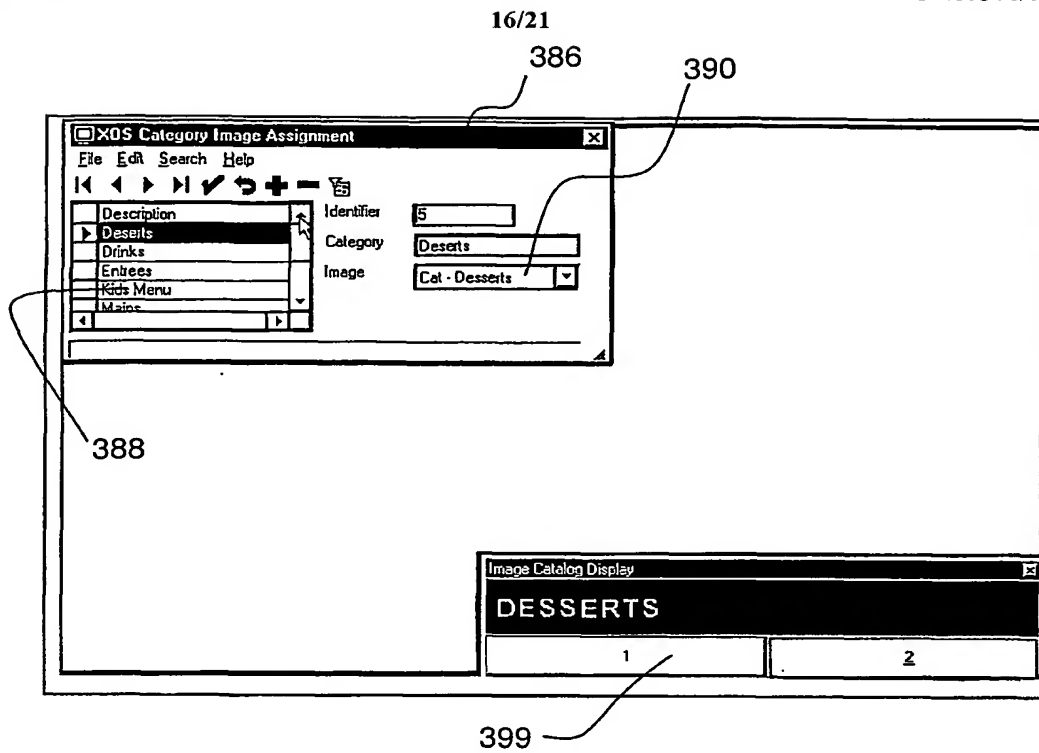
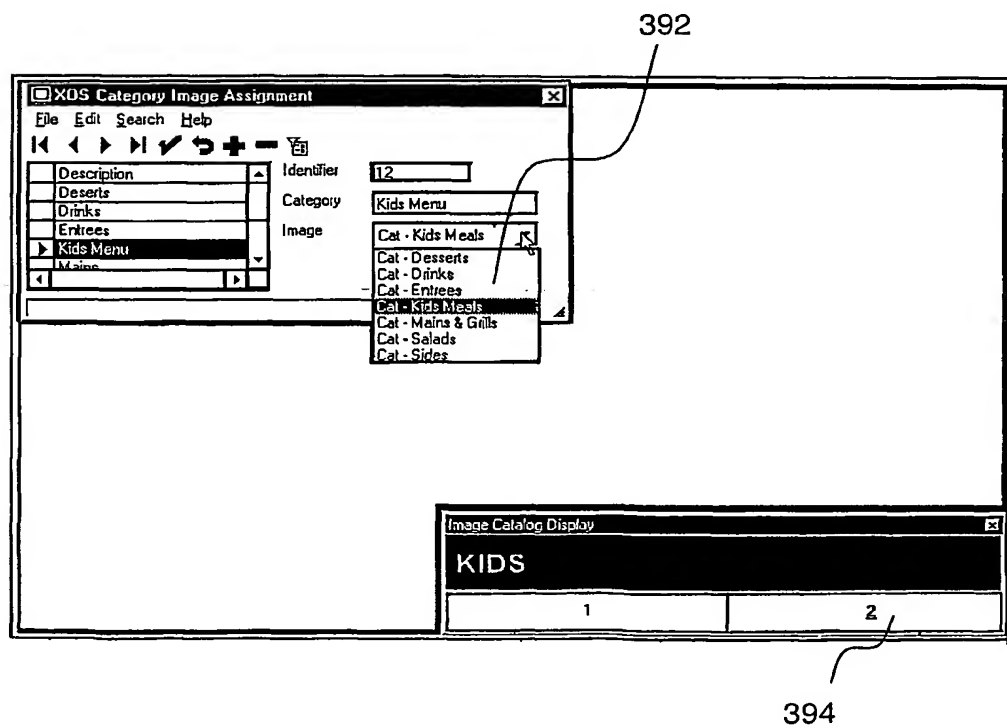


Fig 17



**Fig 18****Fig 19**

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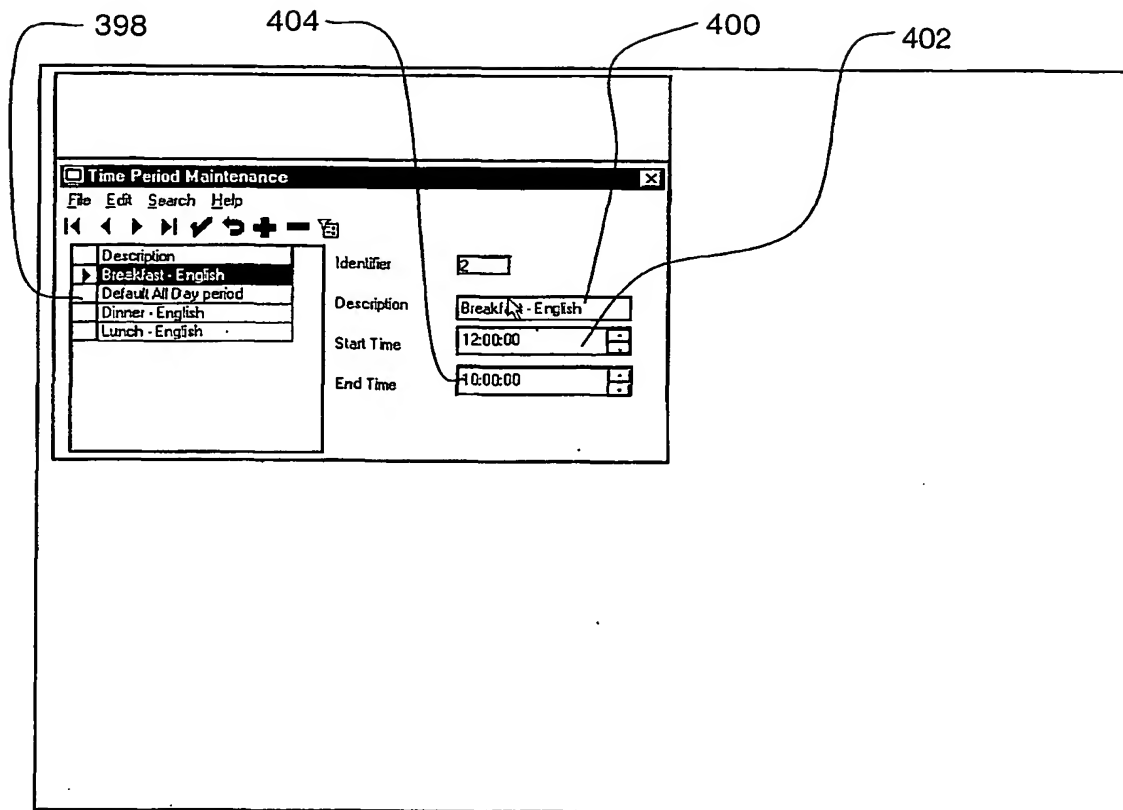


Fig 20

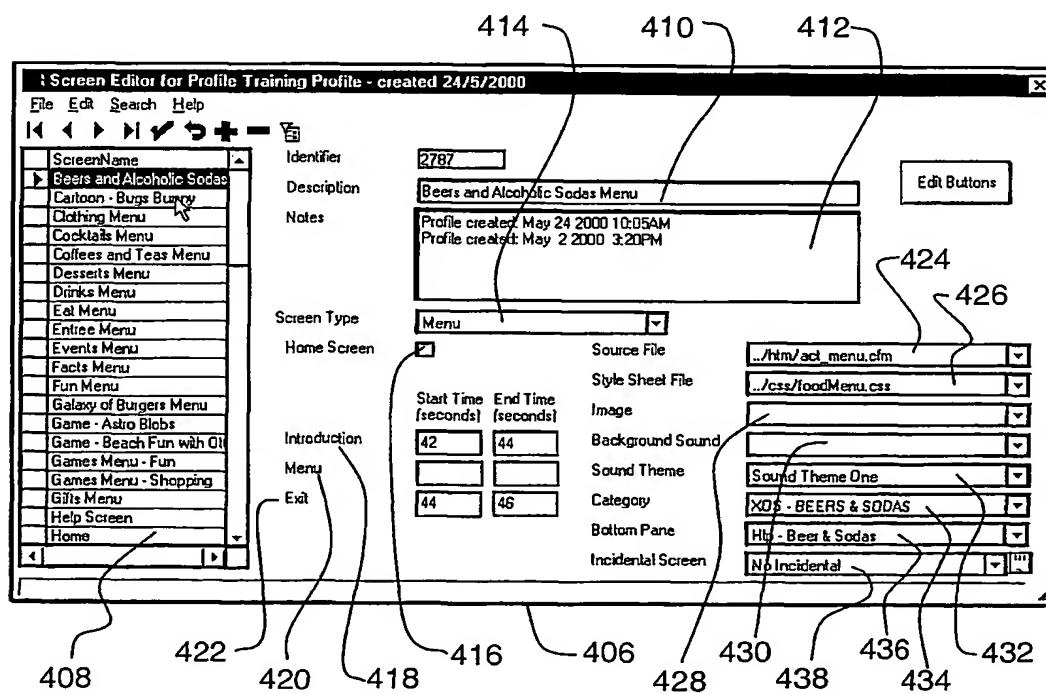
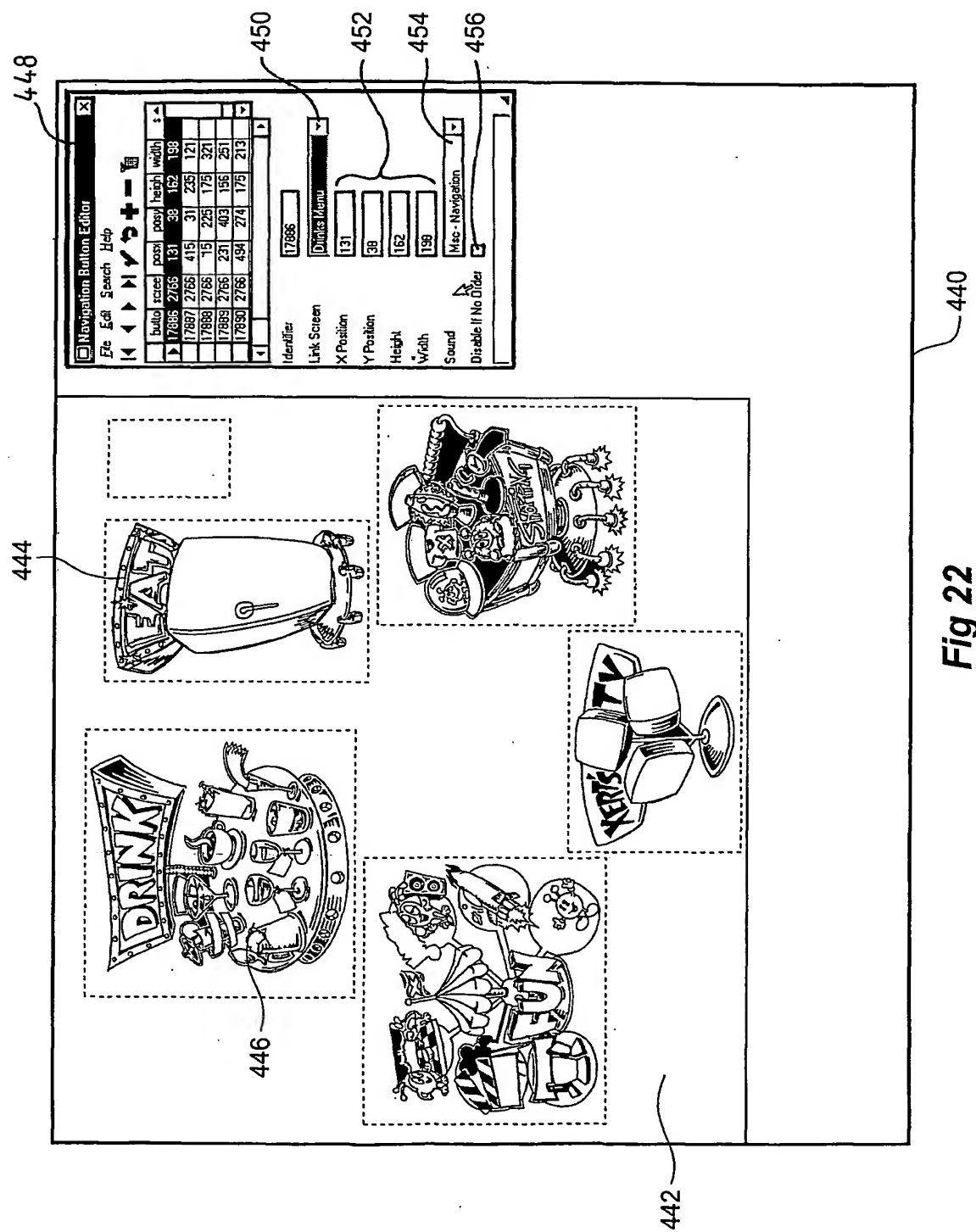


Fig 21



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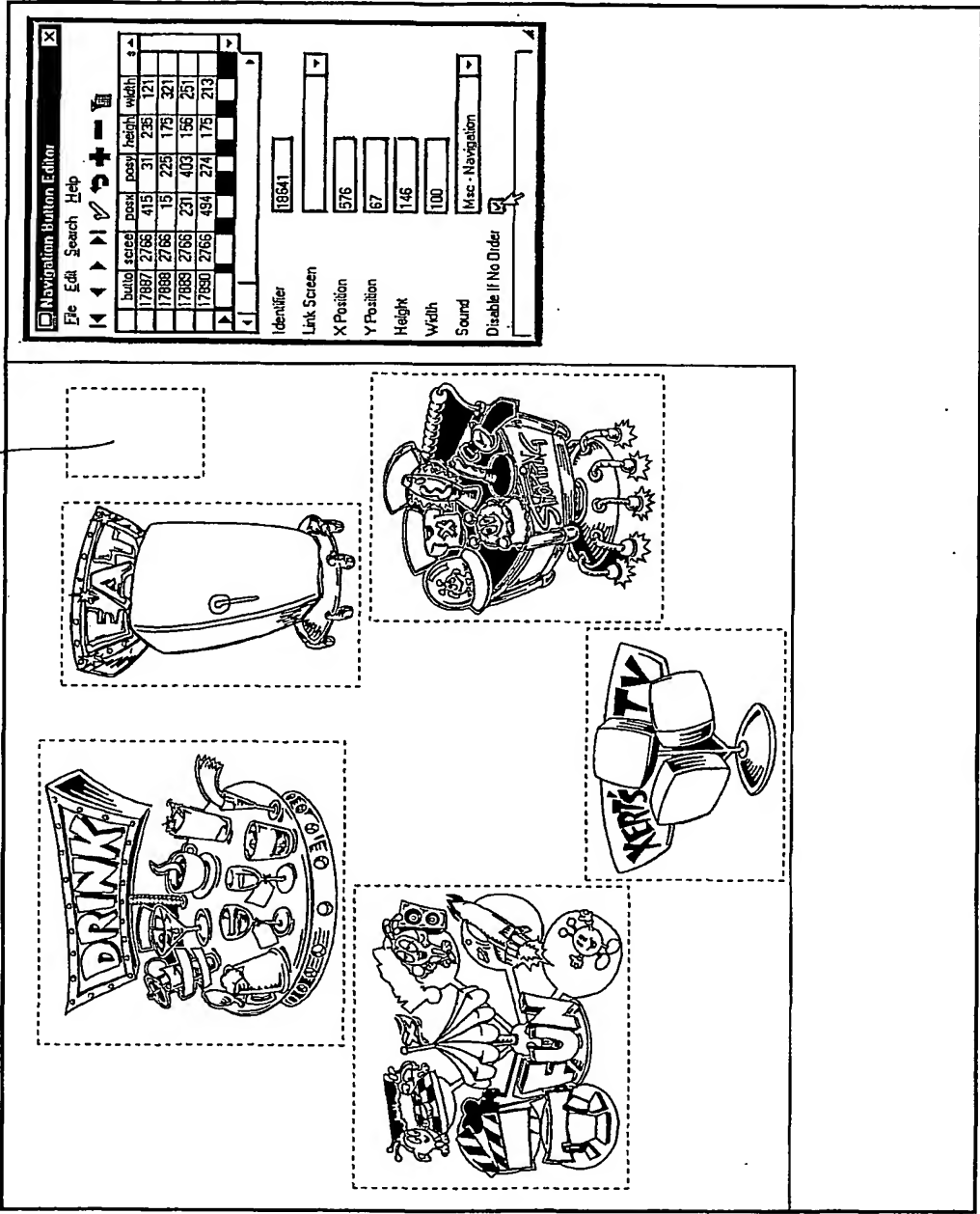
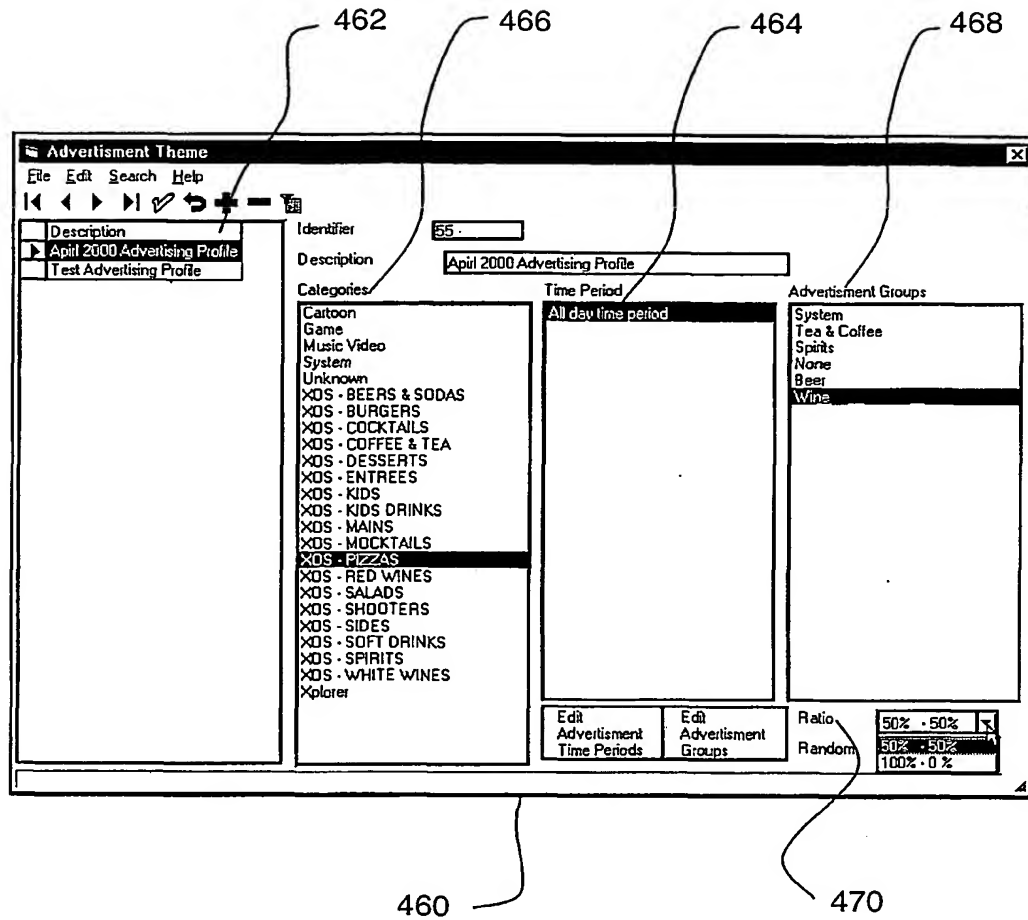
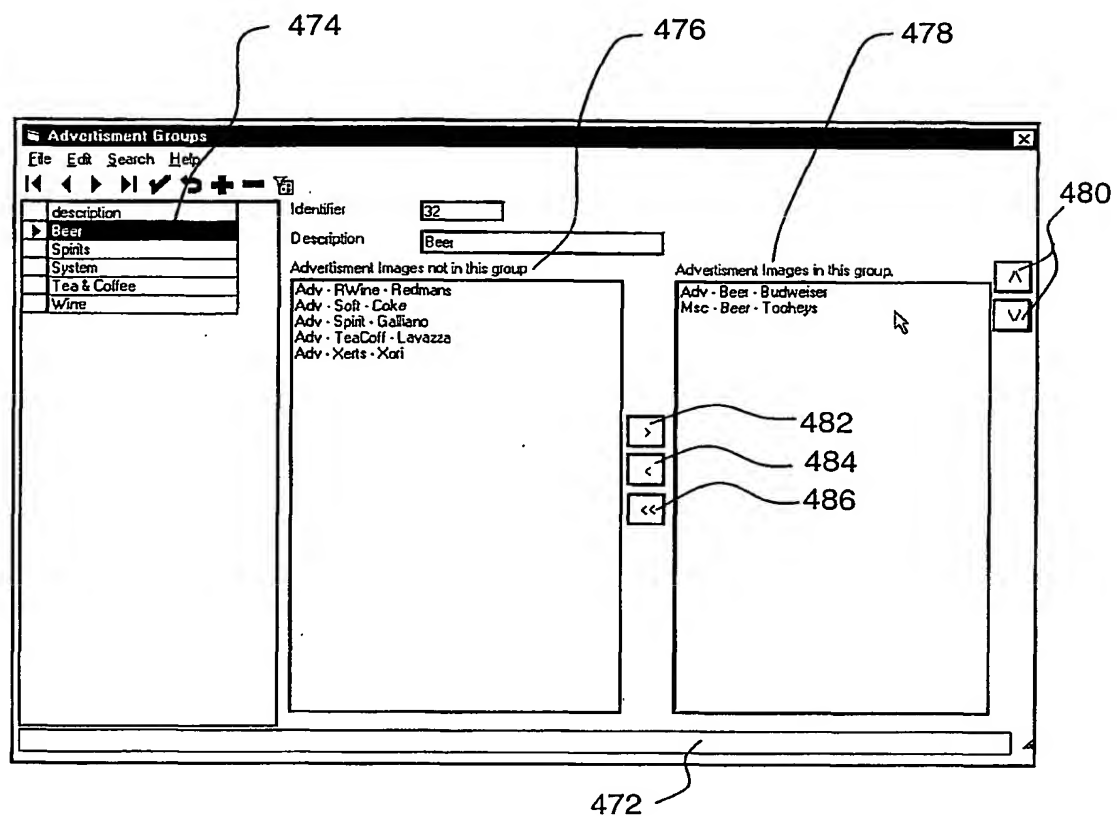


Fig 23

**Fig 24**

**Fig 25**

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU01/01068

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>																						
Int. Cl. <sup>7</sup> : G06F 17/60																						
According to International Patent Classification (IPC) or to both national classification and IPC																						
<b>B. FIELDS SEARCHED</b>																						
Minimum documentation searched (classification system followed by classification symbols) IPC G06F 17/60, 153/00																						
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched AU"IPC AS ABOVE																						
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WPAT, USPTO																						
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>																						
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.																				
A	US 5235509A, MUELLER et al, 10 August 1993																					
A	US 5845263A, CAMAISA et al, 1 December 1998																					
P,A	WO 0154025A, ONEIDA INDIAN NATION, 26 July 2001																					
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex																						
<p>* Special categories of cited documents:</p> <table border="0"> <tr> <td>"A"</td> <td>document defining the general state of the art which is not considered to be of particular relevance</td> <td>"T"</td> <td>later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"E"</td> <td>earlier application or patent but published on or after the international filing date</td> <td>"X"</td> <td>document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>"L"</td> <td>document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"Y"</td> <td>document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"O"</td> <td>document referring to an oral disclosure, use, exhibition or other means</td> <td>"&amp;"</td> <td>document member of the same patent family</td> </tr> <tr> <td>"P"</td> <td>document published prior to the international filing date but later than the priority date claimed</td> <td></td> <td></td> </tr> </table>			"A"	document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	"E"	earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family	"P"	document published prior to the international filing date but later than the priority date claimed		
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"E"	earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone																			
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art																			
"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family																			
"P"	document published prior to the international filing date but later than the priority date claimed																					
Date of the actual completion of the international search 27 September 2001		Date of mailing of the international search report 17 OCT 2001																				
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustalia.gov.au Facsimile No. (02) 6285 3929		Authorized officer  S KAUL Telephone No : (02) 6283 2182																				

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU01/01068

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6087927A, BATTISTINI et al, 11 July 2000	
P,A	WO 0135716A, APEX-PAL INTERNATIONAL PTE LTD, 25 May 2001	



**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
**PCT/AU01/01068**

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member	
US	5235509	US	5128862
US	5845263	US	5353219
US	6087927	NONE	
US	6087927	US	5907275
WO	0154025	NONE	
END OF ANNEX			